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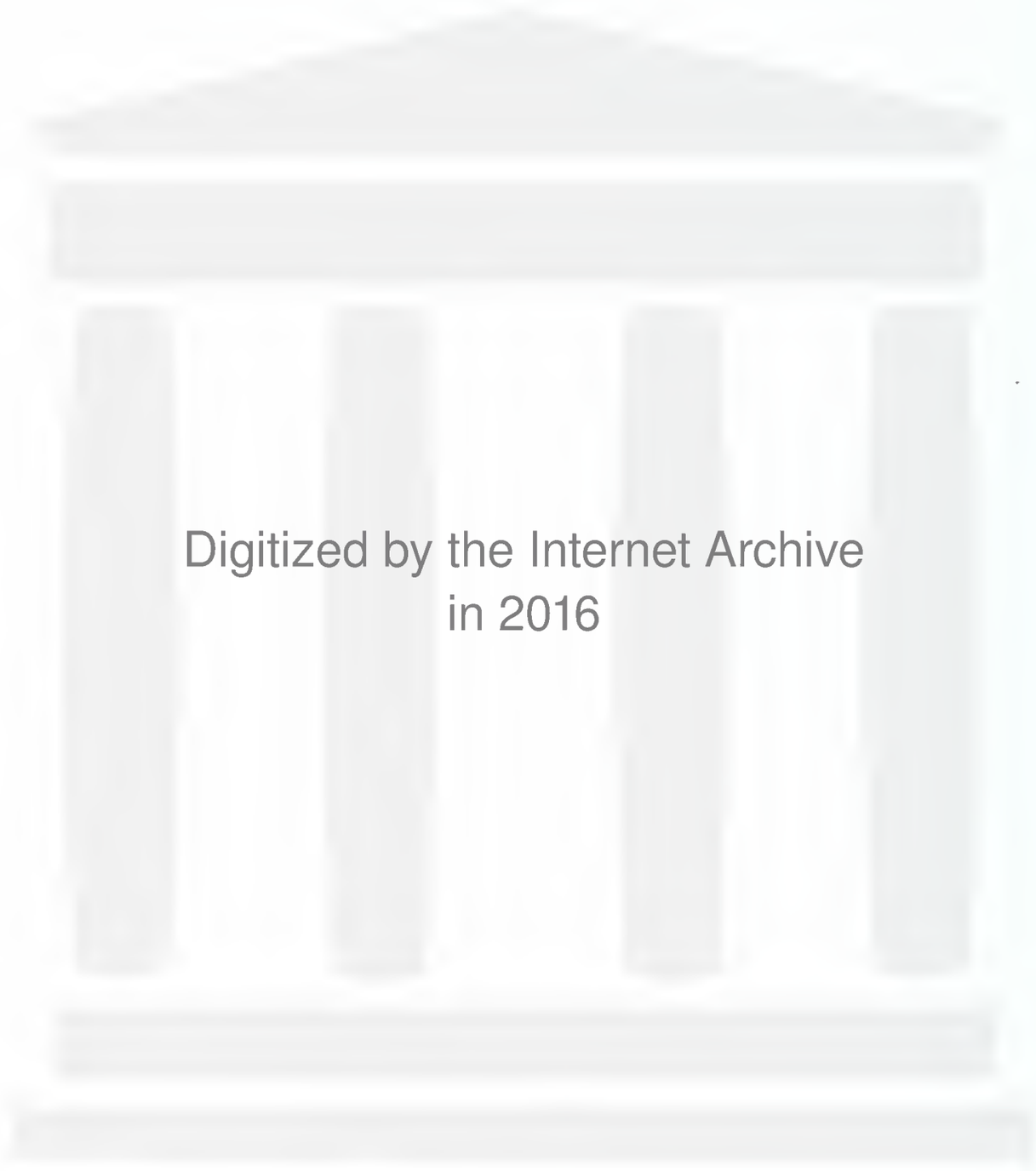
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JANUARY, 1969

PENNSYLVANIA Angler

the Keystone State's Official FISHING · BOATING Magazine...

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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



RESOLUTIONS

To keep with tradition I have listed a few New Year Resolutions on broad topics of prime concern to boaters, fishermen and conservationists. Our effectiveness in obtaining favorable action on these topics will be dependent upon individual and coordinated support at home, by the news media, and in government at appropriate local, State and Federal levels.

Therefore, as boaters, fishermen and conservationists let us resolve to work in a unified manner to achieve success in the following:

1. Having the Federal Government support our long standing request for fish passage facilities at the power company dams which now block the Pennsylvania portion of the Susquehanna River from the benefits of runs of migrating American Shad and striped bass.
2. Passage of legislation to assure that liquid fuel taxes paid on the gasoline used in the operation of motorboats on our waters be returned to the Boating Fund of the Pennsylvania Fish Commission so that it can be put to use improving our waterways and our boating facilities.
3. That we continue to work in a united manner in the fight for clean water in our Pennsylvania streams.
4. That we act positively to assure that our waterways will always be available for public recreational use and that suitable public access be a major goal of the Commonwealth, making these waterways accessible to every Pennsylvanian who wishes to enjoy them.
5. That all users of our lakes, rivers and ponds join together to make our waterways safe for everyone—whether they be fishermen, boaters, water skiers, or swimmers—through the constant exercise of good judgment and recognition of the other fellow's rights.

None of these resolutions are beyond our grasp if all of us who are interested in fishing, boating, clean water or water safety will work together. There is no more powerful force than the unified public voice expressed in favor of a given matter of importance.

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

JANUARY 1969 VOL. 38 NO. 1

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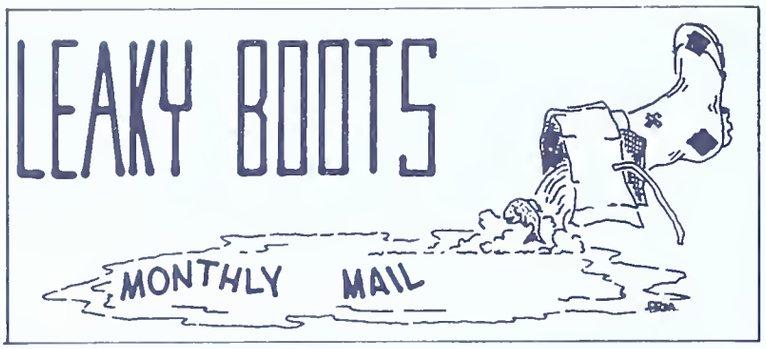
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DUCK HARBOR SUCCESS

I am sending you this note to say that I have enjoyed a very good season of trout in the state of Pennsylvania. Most of my fishing was on Duck Harbor Pond—in fact I was so fascinated with the fishing that I purchased a piece of land on that lake. I have used your access area there, will continue to use it, and would like to extend my gratitude for that use.

In the 1968 trout season I have taken a number of large trout from Duck Harbor. One of these weighed 7 pounds and others weighed 6½, 6, 5½, 5, 4½ pounds and so on. Most of these large trout were brownies.

I was told that a few years ago the Commission stocked these brown trout in that lake and I thought this information might be of value to you for your future stocking program of that lake. If you would like any more information about these fish I would be happy to help.

Andrew Sesak, Clifton, New Jersey

COMMENTS

I just recently caught up on all my back magazines after a very serious auto accident last spring and have a few comments on several articles and letters in recent issues.

I thoroughly enjoyed the story "Oil Moon Over Pithole" since I frequently travel through northwestern Pennsylvania while working. Several years ago I had an opportunity to stop on an early spring day when no one else was around. Although very little remains of the town, it was very interesting to walk through what once were streets and imagine what it must have been like and to marvel at how a city of 15,000 people could disappear so completely.

I was also very interested in the articles on "Eutrophication" and "Air Pollution" in the June issue. The statistics on the amount of material being released to the atmosphere are staggering. I am aware that we are finally beginning to realize that we cannot continue using our waterways as sewers and allowing our atmosphere to continue absorbing tons and tons of pollutants yearly. This leads me to ask, however, about what is being done on a world-wide scale, as we in America are not solely responsible for the pollution of water and air on this earth. I think it would be of interest to any true sportsman and conservationist to know what is being done with respect to our "World Ecology" by other nations and what cooperation is planned or in effect on these problems by the nations of the world.

Finally, I would like to answer a few readers who apparently believe that the only people who should be allowed to catch trout are those who are disdainful of anyone who isn't a dyed-in-the-wool fly fisherman. I am not particularly fond of the so-called fish hogs who follow the stocking trucks myself, but I don't deny their right to do it, if that's their style. Neither do I deny the right of the dry-fly expert who can cast a #24 midge with pin-point accuracy to a rising trout. It seems to me however that some of these purists seem to forget that their license fee entitles them to fish for pike, muskellunge, bass, walleye, etc. for 365 days a year if they so desire the same as anyone else. This is in addition to the privilege of fishing for trout during the summer, fall, ice-fishing seasons and at year-round "Fish for Fun Projects."

They also don't seem to realize that by stocking such lakes as North Park, Canonsburg, Dutch Fork, Harveys and many others across the state, the Pennsylvania Fish Commission is putting the opportunity to catch a trout within the reach of thousands who because of their youth, their advanced age, their disability, their lack of transportation or funds, would not be able to catch a trout otherwise. Everyone is not so fortunate as to live near good trout streams and many people have never had the time nor the opportunity to learn to lay a dry fly out within inches of a rising trout.

I wonder how many of these fellows take a son or daughter along on their trouting outings. I see any number of "families" everytime I get a chance to get near a Commission stocked lake (maybe 10 or 12 times a year if I'm lucky) and I take my 12 year-old daughter and/or my 16 year old brother along as often as I'm able to. We don't catch too many fish, but we have a lot of fun trying. Maybe they should try it sometime!

After all, putting back a fish or two every once in a while, or even every trip doesn't by itself make a sportsman or conservationist of one, nor does belittling the efforts of anyone who doesn't happen to follow the same philosophy or techniques of fishing. It takes a lot more effort and a lot more tolerance than that.

I think the Fish Commission is doing a tremendous job. Keep up the good work and here's hoping the coho salmon projects work out.

Samuel P. Pusateri, Jr., Bethel Park

LOYALSOCK RESIDENT

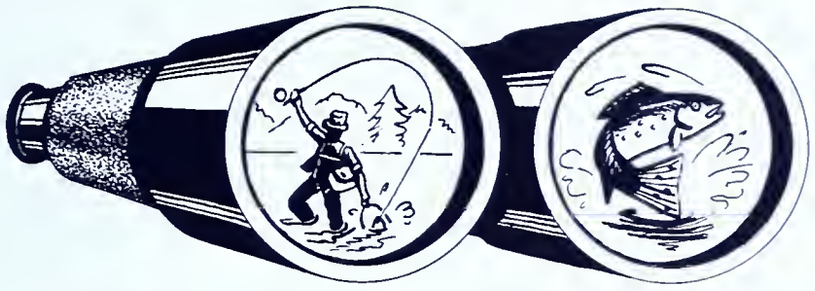
I just finished reading the Leaky Boots section in your September issue of the Angler and was particularly interested in the articles titled "Unhappy With Fish Hogs" and "Bigger Minimum Size."

I live along the Loyalsock Creek and have also witnessed this "show" and feel exactly as Mr. Bennett does. Every year, about 100 yards above our house trout are stocked and everytime there are "fishermen" lined along the bank fishing about ten minutes after the stocking truck leaves. I think the only answer to this is to stock at night!

But this isn't all that bothers me about the trout fishing in the Loyalsock. The other thing is the amount of trout stocked and the amount left for the next year. I understood that many trout won't survive, but why are there so many that do not carry over?

This is where the article about bigger minimum size comes in. If there was a 2 or 3 fish limit and a minimum size of 12 to 14 inches, I think there would be a good or at least better "carry over" and eventually a breed of wild

continued on page 27



FISHING OUTLOOK

JANUARY, 1969

By-- Stan Paulakovich

Fishermen spend many happy hours reliving and retelling stories of their favorite fish. The acrobatics of the rainbow, the selectiveness of the brownie, the beauty of the brookie, the smallmouth's gamely fight, the delicate taste of the walleye, the line-stripping speed of the shad and the bull-like strength of the carp. If we only had a fish that combines many of these qualities. We do—Esox Masquinongy, the Muskellunge.

Even though Pennsylvania has excellent January fishing for trout, walleye, pickerel, pike and panfish across the northern half through the ice, and many acres of open areas across the southern half for trout, pickerel, pike and panfish this month's article will deal with the Falmouth area of the Susquehanna River and its musky fisheries.

In 1958 the Fish Commission seeking to expand the muskellunge range from its normal area in the Northwest corner of the state, introduced fry and fingerlings into other selected waters across the state. Among those selected was the Susquehanna River including the Falmouth area. This program was continued in 1959 and every year since. Few reports or none at all were received until the winter of 62-63, when scattered catches of legal muskies were reported. A story circulated about that time tells of a warden who while on patrol noted a lone fisherman pulling into the shore at Falmouth and furtively glanced up and down the shore. He then scurried to his car and from the trunk took what appeared to be a burlap bag and some newspapers. He hurried to his boat, wrapped something up and then locked it into his trunk. The warden arrived just as he was about to leave, identifying himself, he asked to check his license. Finding everything in order he asked if he had any luck. The reply was yes and he proceeded to the trunk of the car, opened it and unwrapped two legal muskies. Asked why he was so secretive the angler replied, "I've found a good thing here and I don't want too many people to know about it."

Like no other place in the state this stretch of the river, from the foot of the York Haven Dam downstream about 1 mile to below Brunner Island, produces best during December, January and February of each year. When the river is unfrozen and water levels are on the rise at between the four and five foot level the muskellunge go on a feeding rampage. Estimates of the number of musky taken from this area each year generally are about 200 legal fish.

This area of the Susquehanna, about 18 miles south of Harrisburg on Route 441 differs greatly in fishing methods from all other muskie areas. Waterways Patrolman Sam Hall of Lancaster County (R.D. #2, Lititz, Pa. 17543—Phone 717-626-2542) and Porter Duvall of York County (2562 Mt. Zion Road, York, Pa. 17402—Phone 717-755-3361) state that over 90% of the muskie taken here are caught on a jig, which locally is called a bucktail, size 5-0. Asking about color, the reply I got was "anything is good so long as its red and white." Spinning rods in medium stiffness with 8 to 10 lb. test line is preferred. Swivels and wire leaders are frowned on by the local experts who each year catch the bulk of those fish taken, because newcomers to this area don't know of the local methods.

The river during this time of the year often poses some problem because of its high flow and the great number of rocks strewn all over. Just below York Haven Dam is the Falmouth access area and here most of the fishermen are congregated. Boaters who go out anchor below the fast water from the dam and cast toward the rock piles. Casting out letting the jig settle for an instant, pull, reel in, let it settle for an instant, pull, reel in and repeat. It's the same method I've always used for walleye. Most strikes are realized when the lure settles down on the pause, and the strike is automatic when on the pull you find yourself either hung up or onto a fish. Take along plenty of jigs on your trip and also plenty of warm clothing as temperatures often get down to the low teens during this time of the year.

A limited number of boats are available here for rental from a local store owner (Walter Hess, R.D. #1, Bainbridge, Pa. 17502—Phone 717-367-2965). If you're planning a weekend trip call early. Walter is quite an authority on muskie fishing in this area and has on file hundreds of pictures of muskie taken over the last several years. Hotel accommodations are plentiful in nearby Elizabethtown, Middletown, Harrisburg and York. Brunner Island can be reached on the York County side of the river via Route 382 to York Haven then on River Road to Brunner's Island.

Happy Muskie Hunt!

FISHING IN PENNSYLVANIA

Beginning with this issue is the first of a three part series on "Fishing in Pennsylvania." It's hoped that fishermen who would like to know a little more about fishing equipment, methods, and techniques will discover some things they didn't know before and will therefore be more successful—and find the sport even more fun than they have in the past.

Parts two and three will appear in the February and March issues.

by JAMES T. VALENTINE
art by Chuck Ripper

PART ONE

INTRODUCTION

Life in Pennsylvania has undergone a tremendous change during the past few years. The introduction of automation, mechanization, and other time and work-saving devices has given our citizens more and more leisure time. And this spare time has given them the opportunity to look to the outdoors for fun and recreation. And with this increase in outdoor recreation there has evolved a vast army of new fishermen; novice fishermen, willing and eager to get outdoors, have fun, and catch fish.

With the new fishermen in mind we have compiled information on catching fish in Pennsylvania. This material will be presented in basic, simple, and understandable language, omitting the maze of complicated terminology used in some publications.

No attempt will be made to split hairs by arguing that a size twenty-two dry fly is much more effective than a size eighteen. Nor do we endorse the use of the spinning rod over the fly rod. Our purpose is to introduce the novice angler to the various types of fishing equipment, present information on how to use this equipment, and suggest some effective methods of catching the many fish found in the waters of Pennsylvania.

A few "rules" are listed which the novice will find necessary for success. We subscribe to the theory that the "best" time to go fishing is any time you have the opportunity. There is, however, a big difference between fishing and catching fish. The information in this booklet will deal with catching fish. Read, study, and analyze the material, then go fishing—and catch fish!"

BASIC FISHING EQUIPMENT

When a new fisherman walks into a sporting goods store, he is likely to become bewildered by the vast selection of fishing equipment offered for sale. Scores of fishing rods of all sizes, shapes, and colors line the walls. The display cases are full of reels that are automatic, free stripping, closed face, open face, level wind, etc.

To add to the confusion, there are what seems to be hundreds and hundreds of "things" to catch fish with. There are spoons, spinners, floating plugs, diving plugs, plugs that creep, crawl, sputter, wiggle, and so on. When this enormous selection of equipment is multiplied by six or eight color patterns of each to choose from, it almost seems hopeless. If it all seems a bit too confusing, keep one thing in mind Mr. Fisherman—most of these "things" will lure a lot more fishermen than they will fish!

At this point we offer our first rule for the novice fisherman to follow: *A SMALL AMOUNT OF FISHING EQUIPMENT, PROPERLY USED, IS ALL A NEW ANGLER NEEDS TO CATCH FISH*; all the equipment in the world is no substitute for that certain something that separates the catchers from the non-catchers. It has been said that twenty per cent of the fishermen catch eighty per cent of the fish. These figures are probably close to being accurate, and you can be assured the difference in success is not measured in pounds of fishing equipment owned by the fisherman.

At this point let's begin with the selection of the basic equipment needed to catch fish. Since the fishing rod itself is the heart of the sport, let's examine the various types of fishing rods with appropriate reels and lines to match. Later, suggestions will be made regarding the use of this equipment.

FLY CASTING EQUIPMENT

If a non-fisherman were asked to describe a fishing rod he would most likely come up with a description of a fly rod—probably because old Izaak Walton himself used one; thus, it has developed into the best known fish catching apparatus. In spite of the popularity of this rod its given name is now somewhat misleading.

A good many fly rods that are purchased never cast a fly of any size, shape, or description. They are used solely in the fishing of live bait. This particular rod was originally designed to cast flies and so it is called a fly rod. Let's take a look at this rod, its uses, and perhaps make a few suggestions to the new fisherman who intends to purchase one.



FLY RODS

In this day and age of offering the customer a wide range from which to choose, the rod manufacturers have not slighted the fly rod. A prospective fly rod buyer can start by looking at the tiny ultra-light six foot fly rod and examine scores of rods with various lengths and actions until he reaches the giant salmon rods that measure well over nine feet. At first this may seem confusing, but remember the simple rule of thumb to use when purchasing a rod of any type. Ask yourself the question, "What kind of fish do I expect to catch?" Different fly rods are designed for different purposes: some for casting dry flies, some for wet flies, some for bass bugs and poppers, and some can even do a fairly good job at all of the above.

The novice would do well, when buying his first fly rod, to avoid the extremes. Buy neither the shortest rod nor the longest. Stay away from the very stiff actions and the soft wispy ones. Choose instead a 7½ or 8 foot fly rod, and settle for a medium action. This will suffice for a starter and later on, after you have experimented and gained additional skills, then perhaps you may want to try one of the more specialized fly rods.

Of what material should your fly rod be made? Fiberglas now seems to dominate the market as *the* material in the manufacture of fishing rods. Split bamboo fly rods are excellent but good ones are somewhat expensive. Considering cost, bamboo rods have always been a problem to maintain since mosture will cause warping, the new fisherman would be wise to stick to the fiberglas rod. This material, given reasonable care, will last for many years.

FLY LINES

In purchasing a fly line you can choose a level line, double taper line, or a weight forward or "torpedo-head" line. The particular type of line you choose will depend to a great extent on the kind of fishing you plan to do. You must remember, however, that certain size lines fit or match certain type rods, and a line either too heavy or too light will result in very poor casting. Whichever type you purchase, be sure that it matches your rod. Reputable rod manufacturers inform you on the size line that should be used with each individual rod. If in doubt about what size to buy—ask someone who knows!

continued on next page

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FISHING IN PENNSYLVANIA



The *level line* is so named because it has the same diameter throughout its entire length. It can be used for certain types of fly casting, can handle fly rod lures and poppers, and is excellent for live bait fishing. This is the most inexpensive type of fly line and should be adequate for the novice fisherman.

Double taper lines have the heaviest section in the middle and taper down towards the ends. This is an excellent line for dry fly fishing; however, a good double taper line can be quite expensive.

Weight forward lines have the heavy section near the forward part of the line. This is needed for working some of the heavier lures such as bass bugs and poppers. This type of line is also relativcly expensive.

It is recommend that the novice angler start with a level line that matches his rod. Experience will tell if another type is necessary. The two most important items in fly casting are the rod itself and the fly line. With this in mind, invest in a good rod and line and settle for a less expensive reel.

FLY REELS

Fly reels are generally broken into two groups—the single action reels and the automatic reels. Whichever you choose will have little effect on your ability to cast since the reel does not play an important part in fly casting as it does in spinning or bait-casting. Fly casting is done with the rod and the line. The rod acts as a lever and the line provides the weight. A well-matched rod and line, in the hands of an experienced fly caster, will make hitting a target fifty or sixty feet away seem easy regardless of the type of reel that is being used.

The *single action fly reel* is operated by hand and will collect the line or pay out line as the handle is turned. This is a very light, simple reel, and a suitable, inexpensive one for the beginner.

The *automatic fly reel* makes the job of handling line quite a bit easier. A spring, enclosed in the reel housing is wound as the line is stripped off and when the lever is pressed, retrieves the line automatically. A bit heavier and more expensive, as an all-around reel for fly casting, bait fishing, etc., it does an excellent job. With very little practice the novice can learn to operate it efficiently.

SPINNING EQUIPMENT

Prior to World War II most of the fishing in Pennsylvania was done with either the fly rod or the bait casting rod. After the war the spinning rod was introduced, and since that time it has gained favor with a great many fishermen. At first sight the spinning rod seemed awkward, complex, and difficult to use. However, fishermen tried these rods and were quick to realize that after a few minutes of practice they could cast a quarter ounce lure thirty yards or more. After an hour or so, they were handling the rods like experts. The introduction of the spinning rod has almost completely revolutionized fishing. The very small, fish fooling lures can be cast farther, reaching hitherto inaccessible places.

There is only one true spinning outfit. The rod is rather long—from six to eight feet. It is equipped with a long straight handle and has large line guides. The reel hangs on the underside of the handle. In casting, the reel spool remains stationary and the line "peels" or spins off the spool.

We have a variation of the spinning reel called a push-button or closed-face reel. It too has a stationary spool and the line "peels" off rather than coming off a revolving spool. This is where the similarity ends. In this outfit the reel is mounted on the top of the rod handle. The rod is very much like a bait casting rod in appearance and use. In reality, then, this is a combination of spinning and bait casting and is referred to as spin-casting.

SPINNING RODS

Spinning rods may be purchased in a variety of lengths and actions. Assuming that you, the novice fisherman, are looking for an all-around outfit that will work well in the catching of pan fish, trout, bass, and walleye, we would suggest you consider a 6½ or 7 foot medium action fiberglas rod. This type rod will handle lures from ¼ and ¾ ounce



well and, except for certain specialized types of fishing, should be an excellent choice for the beginner.

Many new fishermen ask the question, "What is the best brand of fishing rod?" To answer this question would be like trying to render an opinion as to what is the "best" automobile made. Many brands are excellent so it becomes a matter of individual choice. Choose a rod to fit your pocketbook. Keep in mind that quality products are necessarily more expensive and be guided accordingly.

SPINNING REELS

The same may be said for reels. Materials and workmanship in the quality lines make them naturally more expensive.

SPINNING LINES

Monofilament line is the most popular line for use with the spinning reel. Braided nylon spinning line can be used and is preferred by some, but in general, monofilament is recommended. Monofilament is a single strand transparent line, that is manufactured in various line strengths—the higher the line strength, the heavier the line. The lighter the line, the more casting distance you get. One of the most common mistakes that a new fisherman makes is to use a spinning line that is too heavy. For general all-around fishing a six pound test line is recommended.

SPIN-CASTING RODS

Spin casting rods look very similar to the traditional bait-casting rods. The major difference is that spin-casting rods are usually longer, and the line guides are larger as in the spinning rods. The larger guides allow the spinning line, that is peeling off the reel in coils, freedom to slip through with a minimum of resistance. This, of course, results in greater casting distance.

The spin-casting outfit has certain advantages over the spinning rod. A novice can master this outfit in a very short time. Most experts also agree that a greater degree of casting accuracy can be obtained with this outfit.

There is no question that spin-casting outfits are excellent for the novice as well as the experienced angler. A 6½ foot medium action rod, made of fiberglas, would be a good choice for the new fisherman.

SPIN-CASTING REELS

Spin-casting reels, or push-botton reels as they are sometimes called, are offered in as wide a choice as the spinning reels. A veteran fisherman friend can perhaps introduce the beginner to his tried and tested favorites.

SPIN-CASTING LINES

Monofilament line is used with spin-casting equipment. The pound test line you use depends to a great extent on the type of fish you expect to catch. For instance, if you are after some of the larger species, such as walleye, and the possibility of landing a fish in the six to eight pound class is good, an eight or ten pound test line would be suitable. For trout fishing, a four or six pound test line will do a good job. In general, a six pound test line is recommended for use on the spin-casting outfit for the beginner.

BAIT-CASTING EQUIPMENT

While spin casting is becoming very popular, bait-casting rods are still preferred by a small group of fishermen who rely on deadly accurate casting to produce fish. Largemouth bass, for instance, tend to lurk in and around deadfalls, sunken logs, and lily pads. This fighter will sometimes refuse to move more than a few inches for a lure, so placing it right in front of his nose is a must.

Casting to a log or particular hole in the lily pads and hitting the mark repeatedly demand extremely accurate casting. The bait-casting outfit will provide the tools for this type of critical casting. This, however, is a more specialized type of fishing and is better left to the expert fisherman.

The second group who seem to prefer bait-casting equipment are the fishermen who are after the larger members of the pike family, namely muskellunge and northern pike. Since many of these fish caught are in the twenty pound class, it becomes obvious that heavier equipment is a must.

BAIT-CASTING RODS

Bait-casting rods are available in a variety of actions. The term action, as we understand it, is used to describe the whip or spring in the rod that causes the lure to be cast. Generally speaking, the more action or whip, the lighter the lure that can be cast with that particular rod. A me-

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THIRTEEN YEARS AGO A CRIPPLED B-25 SET DOWN ON THE MONONGAHELA RIVER ONLY A FEW MILES UPSTREAM FROM PITTSBURGH'S GOLDEN TRIANGLE. MANY OF TODAY'S RECREATIONAL BOATERS WHO ENJOY THEIR SPORT ON THAT STRETCH OF THE RIVER MAY NEVER HAVE HEARD THE STORY OF . . .

The Mysterious Mon

by Dennis O'Neil



THIRTEEN YEARS AGO a plane like this—a converted B-25—disappeared in the Monongahela River. Never found, today's boaters may be passing over it as they pursue their sport. (official U.S. Air Force photo)

THE MONONGAHELA RIVER, surging northward into Western Pennsylvania's industrial heartland, has churned up mystery upon mystery through the years.

Like the live alligator that was discovered in the river at the turn of the century. The huge reptile, with jaws powerful enough to rip off a man's leg, was turned over to Carnegie Museum, but no explanation was ever ventured as to its origin.

Then there was the time Pittsburgh police investigated a car that drifted off a wharf into the Mon's murky depths. The police dredged, and—behold!—came up with a car. Unfortunately, it was not the yellow convertible they had been seeking.

Fishermen turned up another Mon mystery. While casting from the south shore near Pittsburgh, they uncovered a fossil of a tusk of a gigantic animal.

Experts found the answer to this one, however. They ascertained the animal was a prehistoric elephant—a mastodon—shedding a little more light on the region's dark past.

But one mystery of the Monongahela River, still unsolved, remains the most baffling of all.

How could a river swallow a 62-foot-long airplane, with a wingspan of 55 feet, and leave no trace of it?

The 128 miles long Mon did it—13 years ago. And not so much as a propeller blade has ever been found!

In this chapter of Mysteries of the Mon, the chief elements are courage, controversy and frustration.

Late in the afternoon of January 31, 1956, an Air Force B-25 converted bomber, with a three-man crew and four passengers, all military men, took off from Nellis Air Force Base, Las Vegas, Nevada, bound for Washington, D.C.

The plane made a refueling stop in Detroit, Michigan, where one passenger departed. Another stop was planned for Olmstead Air Force Base, near Harrisburg.

The plane never made Olmstead.

The pilot, Major William L. Dotson, found his fuel gauge over Butler County dangerously low.

He then changed the course of the twin-engined B-25 and headed for Allegheny County Airport.

The snaky Monongahela River came into view and the pilot considered the ribbon of water as a possible emergency landing strip.

"Then I noticed the fuel index registered empty," Dotson later recalled, "and I started flying along the river looking for a place to glide down.

"I wanted to avoid crashing in a congested area."

Meanwhile, the co-pilot, Captain J. F. Jamieson, sent out distress calls on the radio.

"May Day . . . May Day . . . May Day . . ."

The engines quit and the plane spilled into the river between two bridges, a geyser of water punching at the sky. The location was about six miles southeast of Pittsburgh's famed Golden Triangle.

"Water splashed over the plane and we pulled out the top hatch," related Dotson.

Capt. Jamieson crawled out first, onto the wing. Maj. Dotson followed.

Sergeant William E. Soocey and Captain J. P. Ingram escaped by the same route, but Airman Charles L. Smith and Sergeant Alfred J. Alleman were forced to use a side hatch and go under the frigid water to escape.



THIS STRETCH of the Monongahela River, about six miles from downtown Pittsburgh, was the scene of the 1956 crash of an Air Force B-25. The pilot cleared the high-level bridge (background) and sent the plane splashing into the river about where the arrow indicates.

The river was swift and swollen, filled with ice chunks.

As the bulky plane floated downstream, hundreds of spectators lined both shores. Some observed the men standing on the wing or tail section.

The plane floated for about a mile. The submarine-shaped hull then nosed forward and the craft gracefully sank.

Maj. Dotson had been confident he could put the B-25 down on the water safely. He was also confident the men could swim to shore.

He was nearly right.

Four men were rescued; two drowned.

Three survivors were picked up by boats dispatched to the scene. The fourth was found floundering 20 feet out in the water and was helped to safety.

The tragedy was over. But the mystery was just beginning.

The U.S. Coast Guard, the Police River Patrol and the Army Corps of Engineers began a search for the submerged plane and two missing bodies.

Almost immediately, the River Patrol boat snagged what its crew thought was the B-25. The spot was three-quarters of a mile downstream from where the plane sank.

The location was marked with a lighted buoy. A later search proved futile. The snagged object was not the plane.

Soon after, a Civil Air Patrol plane began an aerial search of the stretch of river where the B-25 went down. What was thought to be the tail section of the craft was spotted.

The pilot said he saw the water "boiling furiously" around an object just below the surface.

Nothing came of this "sighting" either.

Meanwhile, the river, in a surly mood, did her best to hamper dragging operations.

The waters were fast and roily, and the run-off from winter snows and rains had pushed them over their banks.

"Experts Fail To Find Plane," read the headline in one Pittsburgh newspaper a week after the crash. River experts were "baffled," the story went on to say.

Finding a B-25 in the Mon was getting to be tougher than finding a needle in a haystack.

The Army Engineers—using a million dollars worth of equipment to drag a three-mile stretch of river—were thinking about junking their $1,000-a-day fishing expedition in favor of more scientific methods.

They employed a sounding device that, working on the principle of sonar, would show an abrupt change in depth of the water, indicating a large submerged object.

They also used a gadget to detect radioactivity, since some of the plane's instrument dials were radium-coated to enable reading in the dark.

The Air Force, quite naturally, was anxious to locate the wreckage, as well as the bodies, to make a complete investigation into the cause of the crash.

About that time, several divergent theories developed about how such a plane could disappear in a river 1,200 feet wide with a depth ranging from 12 to 30 feet.

One line of thought was that the plane was wallowing

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LOCKMASTER HARRY HERGENREDER points to the giant gates of Emsworth Dam on the Ohio River, 12 miles downstream from the site of the B-25 crash. Officials believed the dam was the farthest point the submerged plane could have traveled, that its gates would have prevented the passage of the plane if it remained in one piece, as it was thought.



HAPPY FISHERMAN heads for a tip-up that's been triggered by a strike (flag in upright position).

TIPS / TECHNIQUES FOR

ICE FISHING

by DON SHINER

Those who have gone fishing in winter pretty well know the score on ice-fishing. Others who have not, but who are tempted to get involved, have a slight disadvantage in that they have little or no experience to draw upon. Techniques for catching fish when ponds are blanketed under layers of ice remain largely a mystery to many.

The first problem facing fishermen is getting lines through that thick barrier of ice in order to reach the fish schooled below. Ice often measures upward of six to seven inches, and may run much deeper than that. Minimum safety thickness is a solid four inches.

Most fishermen cut holes in the ice by using a chisel, ax, auger or chain-saw. The ax is adequate for this task, though least suitable of the four mentioned, while the power chain-saw does the job fast, but is on the expensive side to own and bulky to carry. Most settle for a long-handled chisel, usually a home-made affair consisting of a broad wood-type chisel fitted to a length of pipe. Cutting edge is kept sharp to make chipping easy. A rope should be tied to the handle as a precaution against dropping the chisel through the hole and losing it. Also very popular are the variety of commercial augers on the market today.

The ice hole seldom needs to be larger than six or seven-inches in diameter. A good size fish can be pulled through one of this size and bigger holes can be dangerous. Edges should be chipped smooth to prevent cutting or fraying lines.

A skimmer tool is helpful though by no means as important as the ice-chopping instrument. It aids in removing slush and skims of ice that form across the hole when temperatures are below freezing. These, likewise, may be home-made affairs or purchased from a local sports shop. Long handle soup ladles or dippers, punched with holes, are suitable. A rather simple one, resembling an oversize



SOME TOOLS that might be found on the ice—a minnow bucket, some extra gear (perhaps carried in a handy pail), and something to cut a hole through the ice (the ax is probably one of the least satisfactory of the several things that could be used).

fly-swatter, is made with a heavy wire frame covered with ¼-inch wire mesh and fitted to a wooden handle.

One or two galvanized buckets are handy on the ice. Minnows or other live-baits are customarily carried in one bucket. Gear—extra hooks, lines, sinkers, tip-ups, skimmer, jig-rods, lunch, gloves, etc.—can be carried in the other. And a small board placed across galvanized-type bucket provides a good seat on the ice.

Probably the most popular fishing rig is the tip-up which dispenses line when a fish seizes and runs with the bait, and at the same time signals to fishermen that action is at hand. One commercial model has braces which unfold for setting across the ice-hole, and an upright arm which suspends the reel and line in the water below the ice. Line pulled from the reel triggers a flag whch pops up to signal the fisherman. Skims of ice that form across holes rarely interfere with the operation of this tip-up.

Pennsylvania laws allow fishermen to operate five tip-ups at one time. Fishermen usually set up this number in holes chipped across some cove, and find that they stand a better chance of catching fish than when a fewer number is used.

A good plan of action is to measure depth of water beneath each ice hole. A hand line and sinker can be dropped into the hole and knots or yardage counted as the sinker settles to the bottom. Various depths may then be tried until the strikes begin.

A hand-line and bobber can also be used. The bobber suspends the bait at the desired depth and then signals when fish are biting. Surplus line is wound on some type of holder, often one consisting of a small frame-work of wood or plastic.

Jig-fishing is another popular ice fishing method. It is possible that more than might ordinarily be caught can be attracted this way although the angler can't use as many.

All sorts of rods can become "jig sticks," ranging from handle portion of fly rods to complete spin-casting poles, complete with reels. However, a regular reel may soon clog with ice and become inoperative. Many dispense with this summer-time gear, and cut out a suitably shaped stick from soft wood. The stick usually has an enlarged center portion which serves to store line, and a large eye-screw fitted to one end for the line to pass through.

All this brings us to the subject of baits suitable for winter fishing. A recent issue of the ANGLER carried a story on finding bait during winter months. A short resumé of this article might prove helpful for those who missed reading this feature.

Live baits for winter fishing include almost anything edible that is available. These include: 1) larvae of corn-borer remaining in old stalks in fields; 2) grubs found in galls of old stems of goldenrod; 3) larvae in old wasps' nests; 4) minnows from brooks and rills; 5) golden-grubs found in chaff and damp grain in grist mills; 6) worms and 7) crickets, if you are lucky enough to have some stored in the basement of your home.

Catch the first fish and the bait problem is solved. Small strips of skin, with fins attached, become suitable baits. So do chunks of flesh, and even eye-balls and gills from this catch.

Live baits are most generally used with tip-up rigs, while metal spoons and weighted flies are perfectly alright, indeed even preferred, for jig-fishing when the angler keeps them in constant motion. Polished lures moved about beneath the hole through which sunlight descends often attract fish from afar.

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A SKIMMER comes in handy when slush and ice form in holes. They can be made or bought and save fisherman from some cold fingers if he has to keep cleaning hole by hand.



A PORTABLE CHAIR or seat of some kind is particularly useful to the angler who likes to use a jigging rod while ice fishing.

A DRY FLY CADDIS PATTERN

by Chauncy K. Lively

CADDIS-FLIES ARE WELL KNOWN TO TROUT all over the world. A member of the order Trichoptera, caddis are also known as sedges and in Ireland they are sometimes called rails. Entomologists now believe that there are more caddis species in existence than mayflies. However, many species are considered unimportant from the fly fishermen's standpoint and the specific imitation of the more common types, with a few general patterns to meeet the occasional odd situation, will fill the needs of most anglers.

Caddis are often mistaken for moths, particularly in flight, but there are differences that make them easy to recognize. Caddis have long antennae which seem to point the way in flight and at rest they fold their four wings over the body in tent-like fashion. A close look at a caddis under a powerful glass will reveal that its wings are covered with tiny hairs, whereas the wings of moths are covered with minute scales.

There are two occasions which suggest the use of a dry fly caddis imitation. The first is at the insect's time of emergence and the second is when the females return to the water to lay their eggs. On emergence the caddis often rides the water for some time before flying away. But unlike the usual serene float of the mayfly dun, the caddis rides the water nervously flitting, whirling, fluttering and skipping, an action trout find hard to resist. This erratic behavior ought to be imitated by the angler by subtle little twitches of the rod tip, a procedure that takes some practice to achieve properly without over-doing.

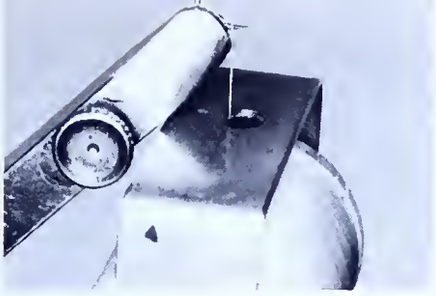
In some species the female caddis lay their eggs on the water, while in others they swim under the surface to deposit their eggs on the stream bottom or on some submerged object. Knowingly or not, the old-time wet fly fishermen imitated this latter trait and much of the effectiveness of the winged wet fly has been attributed to its imitation of the submerged, egg-laying caddis.

The late Sid Gordon observed that the underwater swim of the female was often preceded by a dive from the air, by which means entry through the water's surface film was

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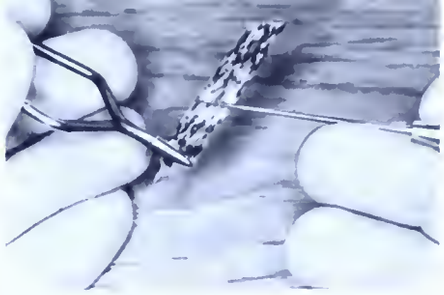
THE CINNAMON Sedge, a caddis common in Pennsylvania.



Step One



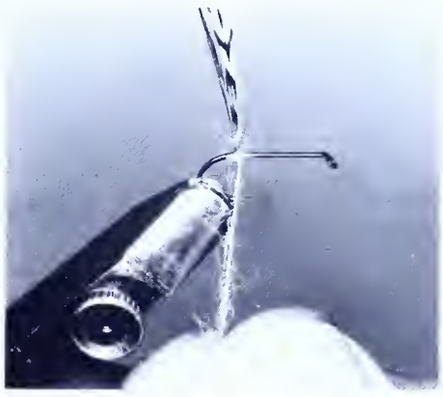
Step Two



Step Three



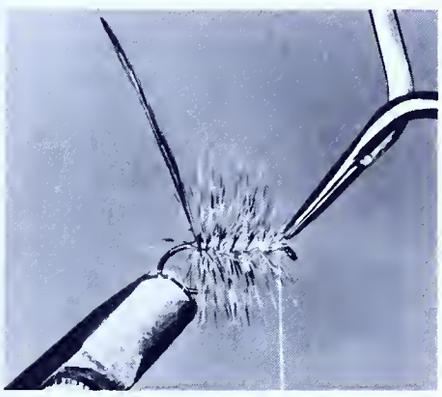
Step Four



Step Five



Step Six



Step Seven



Step Eight



Step Nine

TYING THE CINNAMON SEDGE:

No. 1—Secure a size #14 fine-wire hook in vise and tie in fine yellow tying thread just ahead of bend.

No. 2—From a cinnamon-colored turkey quill feather cut a section about ½″ wide.

No. 3—Stroke quill fibers until they are straight and clamp thin end of quill in hackle pliers. Coat outside surface of quill (side most distinctly marked) with thin coating of vinyl cement, spread with bodkin needle. Set quill section aside to dry.

No. 4—Tie in one brown and one grizzly hackle of good quality and proper size. Length of hackle fibers should be 1½ to 2 times gap of hook. Hackles should be tied in to stand vertically with glossy sides facing eye of hook. Bend hackle butts forward and bind to shank with several turns of thread. Trim away excess hackle butts and return thread to original position.

No. 5—Mix a dubbing of yellow seal fur and tan Cross fox fur. Wax a section of the tying thread (about 3″) and apply dubbing to thread with finger tips, rolling fur evenly around thread.

No. 6—Wind dubbed thread forward and half-hitch behind eye of hook. Body should be medium-thick and coarse, as shown.

No. 7—Grasp tip of front hackle with hackle pliers and wind palmer-fashion over body. Tie off behind eye and half-hitch. Repeat operation with rear hackle, spacing winds same as front hackle. Trim away excess hackle tips.

No. 8—With fine-pointed scissors, carefully cut a wide V out of hackle on top of body.

No. 9—Pick up turkey quill section prepared in Step 3 and fold along its length with vinyl coating on outside. Cut a 10″ length of thread (any color). Hold folded quill between left thumb and forefinger, exposing butt end, and insert end of thread between thumb and quill. Squeeze thread tightly against quill with thumb and loop long end of thread twice around quill. Close ends of thumb and forefinger around loops and pull thread tight with right hand. Without releasing left hand hold, make two half-hitches over tightened loops. Trim off ends of thread. This procedure pre-forms the wing independent of the hook and permits its attachment to the hook without crushing the hackles. Trim end of wing to shape shown in Step 10. Wing should be about twice body length. With thumbnail, open underside of wing until wing is tent-shaped.

No. 10—Grasping crimped wing butts with right hand, hold wing in position and bind securely to hook with left hand. Be sure only crimped portion is bound, otherwise shape of wing will be altered. Trim away excess butts, build up a neat head with tying thread and whip finish.

No. 11—Cut a wide V out of hackle on underside of body, leaving only hackle fibers extending out laterally. Apply a drop of head cement or lacquer to head.

No. 12—Completed Cinnamon Sedge.

Step Ten



Step Eleven



Step Twelve





WHEN ITS NORMAL DIET of insects and spiders is hard to secure the tufted titmouse welcomes suet and sunflower seeds. At the turn of the century titmice were considered Carolinians; now they make our state the northernmost limit of their range.

Afield in January

by CARSTEN AHRENS

The chickadees usually suggest it. They swoop down on the suet and sunflower seeds at the bird tray outside the kitchen window, gayly calling to each other, ignoring the icy, boisterous winds that vainly try to carry them somewhere else, and soon I have on my galoshes, my ancient hat, and mackinaw. My wife usually encourages me to wear her gift, ear muffs, but I don't; I'm afraid I'll miss something I should hear. Soon I find myself taking one or another of my favorite trails; occasionally I wonder as I trip on a snow-hidden log or as I am about buried in a snowslide why I ever left the comfort of the kitchen window. But there's something about being abroad in January, or February, or March that I can't resist.

There are a greater number of birds about my lawn and orchard, encouraged by the feeder, probably, than I'll find on my walk. Today, along with English sparrows and starlings, our visitors included the hairy and downy woodpeckers, a song sparrow, juncos, nutcrackers, and the chickadees. Usually the titmice are very evident, but I didn't meet them until later in the day. A friend from a neighboring town is intrigued by the nuthatches that travel head first down the tree trunk. They never visit his food tray. But then, he has wild pigeons that I never see at mine.

. . . the meek shall inherit the earth . . .

Last fall just below the orchard was as fine a stand of goldenrods as ever yellowed an autumn countryside. Today the gold is gone; each plant has a snowy crest. And down the stalk on about one out of every five plants is an odd swelling . . . about the size of a marble. These are galls. They are found on a variety of plants . . . the oaks and junipers are often victims in these parts . . . and they are caused by one-celled, non-green plants, certain insects, and a few other invertebrates. The plant suffers some indignity as when a midge or a wasp pierces the epidermis and lays an egg in the tissues of the goldenrod. Here the tiny creature goes through most of the stages of its life cycle. The plant cannot evict the newcomer but it is stimulated to produce extra cells in a vain attempt to wall off the intruder who uses part of the new cell growth for food. The goldenrod usually lives through the experience but is permanently shaped by it.

. . . winter wreaths . . .

On the long slope of pasture land that leads down to the stream, the snow has greatly evaporated and the old field is irregularly polka-dotted with circles of leaves that are almost summer green. The leaves radiate outward from the center, dandelion fashion, to form circular clusters that seem to huddle in the general stubble, absorbing the sunshine and escaping the sharp wind. They are the start of next season's common mullein and teasel, but there is no sign of the tall, upright stalk that is so characteristic of both plants. Of course, the woolly leaves of one and the prickly leaves of the other give away their identity. But comes warm weather, the foundation is there that will send up the stalk, and these rosettes, having played their part, soon dry up and disappear.

. . . winter insects . . .

One nice thing about a winter walk, I decide when I reach the stream, is the absence of the minute flies that last



SOME TALL WEEDS such as the common mullein and teasel spend the autumn, winter, and spring in leafy rosettes flattened against the ground and protected by surrounding plants from icy winds.

summer seemed to be fascinated by my eyes. Exasperating little chaps! One experiences in January the sting of the wind but not that of mosquitoes, no-see-ums, and all their pesky allies. The low temperatures hold them motionless under the bark, in the soil, in water, even in the debris on the stream bed, in seed pods, or in their self-made cocoons or chrysalids. If they are not hidden securely, the sharp eyes of the nuthatch, several kinds of woodpeckers, or the titmice will find them out. Many of them are deceived by a warm day or two that occur occasionally in mid-winter. Some flies, lady bugs, bees overwinter as adults and during a mild spell will crawl out of hiding and move about a bit. I've seen the mourning cloak and the painted lady . . . both butterflies . . . in January. They add a lovely and at the same time incongruous note to a wintry scene, but shouldn't be mistaken as a sign that an early spring is at hand.

I didn't take the little foot-bridge across the frozen brook, but chose a short cut on the old stepping stones instead. They were dry on top yet firmly frozen into the petrified stream. The ice wasn't clear enough to see water beneath, but one was aware of the vague movement of the vegetation below not frozen in the ice. I could even hear the soft purling below if I listened between the caws of a disturbed crow in a dead elm not far down the creek. Some birds can warble without any effort or apparent exertion but not this crow. He arched his neck and seemed to utilize every muscle to get out his harsh shouts.

. . . what is a good fence? . . .

There's a sturdy stile over the fence that separates the pasture and stream from Martha Moore's tidy apple farms. I always use the stile for it seems comfortably old-fashioned to walk over a fence rather than to crawl under the wires. Martha's fences, barren as deserts, are old-fashioned, too. We've argued much about it, but she's like Robert Frost's neighbor: "Good fences (and she'd add, 'Clean fence rows,' make good neighbors." Every fence on her estate is taut and trim. Not an ivy twines up a wire. Not a bird nests in spring, not a sumac flames in fall, nor does one pick wild berries in summer along her fence rows.

. . . trees in winter . . .

Another stile led me into state park land where there are many trees and shrubs . . . some 42 on my list. Winter is a good time to discover if one really knows the woody plants. Most people identify trees by their very characteristic leaves . . . the tulip, oak, maple, gingko, linden, or sassafras just couldn't be mistaken for anything else. But after leaves fall, a lot of us become confused. But tree genera have certain shapes, bark, and winter buds that are as characteristic as the leaves. You may not be able to tell which species a particular tree is but you'll know to what group it belongs; that is, you'll know it's an oak or one of the maples, etc.

Winter buds are helpful in identifying and also just plain interesting, for Nature does such a neat job, usually, of getting them ready for the winter. I say "usually" because the buds of the horse chestnut, the buckeye, and a few others are cluttered up with a glue that makes them a bit messy. Most of any tree is composed of dead cells, but the buds are alive and must be kept from drying out during the winter. Examine some winter buds . . . dogwood, gingko, magnolia, currant . . . and you'll see what an expert Nature is at wrapping up life for the dormant season. Often it's an artistic job, too. See the buds of the silver maple; they're my favorites.

A winter branch . . . a catalpa, for instance . . . can tell you many things about itself. Although the leaves are gone, their falling left scars where they were attached as well as scars where their sap-bearing tubes were located. Find where last year's terminal bud was . . . you can tell it by a heavy ring of old scales . . . and then see how much the branch grew during the season just past. In a young catalpa, this growth may seem prodigious . . . as much as six feet. From the circle of leaf scars at each node, you'll find that the catalpa grows its leaves in whorls of three or more (instead of opposite as in an ash or maple, or alternate as in an elm or mulberry). And everywhere will be sprinkled tiny openings, the lenticles, which provide the tree with oxygen during this leafless time.

. . . a cocoon collection . . .

When I walk through one shrubby area, I am always on the lookout for the cocoons of our large American moths, the Polyphemus and the Cecropia. The silk shelter of the first is oval, and the second is larger and may assume a variety of shapes. Usually our kitchen window holds six or more twigs bearing cocoons from which the colorful moths will emerge along about June to the delight and amazement of anyone who happens by. The males can be identified by the large, fernlike antennae; the female's "feelers" are far simpler. I always give the cocoon collection a good soaking when I happen to think about it because our houses are dry and each cocoon would have been in rain frequently had I left it out on the hillside.

An acquaintance, a curator of insects in a large museum, regards these big moths as pests. Every June many people who have never seen these incredible creatures happen on one. They conclude it is a rare "bug" and must be worth a good deal. So they take it, or more often mail it to the museum, expecting quite a reward. So there is much explaining to do. The insect is not rare in the first place, and in the second place, it shouldn't have been entrusted to Uncle Sam in just a paper envelope for it is smashed almost beyond recognition by the time it reaches the Division of Insects.

. . . leaving tracks . . .

The tracks of only a few mammals . . . rabbits, dogs, deer . . . were encountered today. But the snow lies as deep as six inches in many places, and the smaller rodents, if they are moving about at all this early in their hibernation time, would be tunneling beneath the snow. There were tracks of a solitary crow and of a flock of juncos near the spring. Their marks demonstrated clearly that some birds like a crow stride along while others hop.

. . . kitchen to kitchen . . .

And so my walk ended where it started, at the kitchen door, and the odor of the roast made me glad to be back home. It's good to be afield occasionally . . . not to escape from life, but to see life from a different angle. Our days are often cluttered up with committee meetings, workshops, buzz sessions, and all sorts of chairman-dominated get-to-gethers. Close up they may seem enormously important; from a stump on a hillside they are apt to be just minutes in a notebook which a decade from now most everyone will have forgotten.



RACES ON A
activities incl

OUTDOORSMEN ARE DISCOVERING something else to do on those cold winter days—take a run with the family snowmobile!

THE PLOT OF THE LATE MOVIE had thickened to about the consistency of April mud, so I flicked the switch on the boob tube and hit the hay. Fresh snow had fallen, adding a few additional inches to an already adequate blanket of white. Then the usual midnight calm of this little Northeastern Pennsylvania village was broken by the drone of a two stroke gasoline engine somewhere on the hill behind the house. At times it was a steady whine, like a chain saw slicing through a thick old maple and gunned sporadically, just like when branches are trimmed.

Never noted for being too sharp at 1:00 A.M., I spent the next few minutes wondering which one of my squirrely playmates was gathering firewood at this hour of the morning. As the minutes passed, I concluded further that this cat must surely be getting himself a wagon load!

But within minutes a second, then a third engine droned into hearing—then it hit me—SNOWMOBILES! Looking out the back window, I was able to follow their flight by the light of their headlamps—brightly lighting the way—wherever *that* was! Accepting the fact that it does indeed take all kinds of people to make a world, I rolled in and called it a night. That's when I first started wondering about snow-mobilers.

Homemade snow-travel machines have been put together in garages and barns probably farther back than many of us remember but "store-bought" units are relatively new. When the Sno-this's, Sno-thats, Ski-whats, and Ski-whiches began appearing at dealers throughout the state not too many years ago, I felt genuinely sorry for the manufacturers—had they but given me a call, I would have pointed out a dozen reasons why these machines wouldn't sell profitably. But nearly forty producers proved I was wrong nearly 200,000 times in 1968 alone!

The mushrooming popularity of snowmobiling is stunning indeed. In Pennsylvania it's fast becoming the winter counterpart of motorboating as a "GO" activity. Who are the snowmobilers? Outdoor lovers! Generally their other hobbies invariably include fishing, hunting, skiing, skating, and hiking. From "SNOW-GOER," the international snowmobile magazine, "Mr. Average Snowmobiler makes quite a picture—he is 31 years old, makes $7,500.00 per year, bought his snowmobile new in January of 1967, and paid $900.00 for a 16½ horsepower machine that is used by his wife and one and a half children. He prefers hunting and fishing in the non-snow months and graduated from high school!



)AY on a snowmobile aren't something for indoor types. Whizzing along at 30 or 40 miles an hour on a zero day is chilly business. Other popular ns by snowmobile clubs. It's an exciting way to see a lot of country, but shouldn't be attempted except with a party of several machines.

OW SPORT

article by
JIM YODER

pictures by
TOM EGGLER

Some of the "different" facts that turned up:

.1% of snowmobilers are bird watchers
1.3% are between the ages of 58 and 63
.1% earn $80,000.00 per year
.04% have ten children operating the vehicle
1.3% buy their machines in July!

While the basic "caterpillar" type drive (with ski-runner steering) prevails throughout the various pleasure lines, each manufacturer has added his own particular quirk to provide the enthusiast with something he thinks is just a little bit better. Love and loyalty to a line apparently runs high in this set. Not less than three dealers (each with a different brand) pointed proudly to their own line and told me "*These* are the machines that have been winning the races!" How about that—a race with no losers!

Dubbed "Snowmobiles" these machines seem equally at home on grass, leaves, or gravel—I've watched them negotiate dry macadam roads with apparent ease. These latter two surfaces however, are not recommended in the manuals. Available accessories lead one to believe he'll need an addition to his garage for storage. Naturally there are trailers for highway transport. There are detachable wheel-units which convert the machine itself to its own trailer. There are conversion kits which include wheel assemblies which facilitate 'year-round usage. High performance heads and pistons, disc brakes, trailing sleds and there's even a ski-equipped "snow camper" which sleeps two adults. Most popular horsepower range is between 16 and 35 although we find ads listing from 10 to 50 horses available in standard lines.

continued on next page

ANY ICE FISHERMEN are using the versatile machines to take them to their favorite fishing spots—but a word of caution. Their use is il-gal on some lakes and dangerous on all lakes. Be careful!



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ROUGH GROUND sends racing snowmobile into the air.

SNOW SPORT

Speed, top speed, that is, is one of the first considerations the "uninitiated" gives to the purchase of a new machine. Veteran operators are not nearly as concerned with this as they are for the machines' "get up and go," its traction and stability in tight turn scrambles. Speeds of 60-70 MPH are no problem to attain with the larger units—running out of space is the limiting factor.

Our frozen rivers, lakes, and streams would appear especially inviting to these snow-cats—once covered with snow. New, clear, smooth ice affords little maneuverability. A flip while skidding side-wise over a glassy surface will quickly make a believer out of a skeptic! If "Over the river and through the woods—" ever sounded enticing, it's now. But—it has its hazards.

As in any other sport, knowing (and *heeding*) one's personal limitations along with those of the equipment in use assures abundant enjoyment with reasonably trouble free sport. With snowmobiles, few limitations have been found. They go anywhere—and they do so just about anytime the operator chooses. This unlimited travelability of these machines places a tremendous responsibility upon the operator to use especially good judgment. The alarming speed with which these power sleds can separate one from the safety of his home or car is frightening. Thirty minutes of sustained travel can set an operator quite a few hours walking distance back in the boondocks! Ice fishing may be reported as terrific on a remote lake now closed to vehicular traffic due to heavy snows and the five mile walk through two feet or more of the white stuff is more than the casual fisherman cares to tackle. But the snowmobile is the answer—BUT DON'T GO IT ALONE! Safety leagues all over the country are recommending the "buddy system" on any trip out of reach of immediate assistance. Breakdowns and accidents, although infrequent, can and do occur. Fuel has a way of disappearing unnoticed at the height of the fun. Wedging a 300 pound plus machine 'twixt two saplings that "seemed far enough apart" calls for more effort than the average man alone can muster. Hidden obstructions, rocks, stumps, etc., can toss an unsuspecting operator for a loop. One Michigan operator sustained a broken back on just such an occurrence. It's rough to be alone and in trouble.

The use of snowmobiles on ice calls for a completely different line of thinking—let's call it "environment evaluation." Ice is deceiving. It can *look* good and *be* good—it can also look good but lack the strength to support a man alone, much less his machine. Strangely enough, the supporting qualities of ice will vary with different locations on the same body of water. This is not news to ice fishermen. Shallow lakes, fed by many springs (and Pennsylvania has a lot of ponds like this) are notorious for patches of thin ice, which at a glance appear no different (on the surface) from the rest of the lake. In 1957-58, Lake Jean, at 2,300 feet above sea level on the Luzerne-Sullivan County line supported dump trucks loaded with tons of stackdust beautifully—only to give way at the edges of the bogs where the stackdust was to be applied. Beaver dams have fooled more trappers than you can shake a pole set at! It's an icy baptism for the unsuspecting soul who fails to recognize the danger.

Inlets and outlets of most lakes can never be trusted and adjudged "safe." While good shoreline ice can indicate generally safe ice conditions—check it out! Veteran ice fishermen, trappers, and ice-skaters are well aware of the treachery of ice. Unfortunately many of the newcomers to the snowmobile set will be newcomers to winter sports in general and would do well to "ask questions *first*"—and skim around later. An hour, two or three of overland travel might make the silky smooth lake surface look appealing but again—*check it out!* There's no better authority than a lake resident, an ice fisherman or skater to fill you in on existing ice conditions on your chosen lake.

REGULATIONS

Check state and local regulations *before* leaving on a safari. The use of snowmobiles is prohibited both on Fish Commission lakes and State Park lakes. They may be used, however, on lands controlled by these two agencies. Game Land roads and trails are open to snowmobiles from January 15th to April 15th (but at no time may they be used to pursue game). State Forest Lands, including abandoned log roads, trails, etc., are open to snowmobile traffic during the snow seasons—at this writing, there are no dates marking the beginning or end of the season. In any case, check with the local representative of the agency concerned in your area: your District Waterways Patrolman with regard to Fish Commission lands; the District Game Protector for specific interpretations with regard to use on Game Lands; the State Forester in your area if in doubt about which "log roads" are usable; the State Park Superintendent for information on marked trails and use within the Park. A new brochure from the Bureau of Parks lists the State Parks throughout the Commonwealth with winter usage.







FISHERMEN Ray Szalewicz and Tommy Hajduk of Oil City pull two walleyes through the ice (above). Earl Smith of Seneca lands a walleye at Tamarack Lake (upper right) which is marked by the sign (center).

HOT FISHING FOR A COLD DAY

by Steve Szalewicz

THE TROUT FISHERMAN BEGINS to anticipate the mid-April opening of another season when the mailman leaves the seed catalog.

Not to be outdone in this anticipation bit, an ice-fisherman looks ahead to ice-fishing just as he is finishing the last sweet corn of the season.

If you fall in the latter category and your tip-ups are in good order, remember this name—Tamarack Lake in Crawford County. It's east of Route 322, mid-way between Meadville and Cochranton.

It may be some of the hottest ice-fishing for walleyes anywhere in Pennsylvania this winter. And while they may not be the biggest, there should be plenty of them under the ice on this 558 acre impoundment maintained and operated by the Pennsylvania Fish Commission and built with the cooperation of the SCS and the Crawford County Commissioners.

From mid-January, 1968, when the safe ice formed through mid-March when the ice-anglers turned their attention to bluegills and crappies as the season ran out on walleyes, it was possible to see eight flags fluttering above a set of tip-ups in an hour's fishing at Tamarack. Catches of 30 walleyes a day were reported with the best catches made in water 8 to 12 feet deep.

Sometimes it was impossible for a fisherman to spud his holes and place his quota of five tip-ups in the water. He was too busy catching and releasing walleyes, rebaiting and resetting the flags. Such action was not confined to any hot-spots. It was available just about anywhere around the lake's ice.

But note the word "RELEASING." This writer caught and freed 64 walleyes during the half-dozen ice-fishing trips he made to Tamarack last January and February. In addition, at least that many more walleyes tripped the flags and either stole the minnows or carried them a bit before they dropped them.

The biggest walleye under our tip-ups was only 14¾ inches long, a quarter inch too short to be legal. However, some ice-fishermen did catch walleyes in the 15-to-17 inch class. But by this season many should be well over the minimum size.

Tamarack Lake was completed late in 1963. It was stocked the following spring with a million walleye fry. In spring, 1965, the Pennsylvania Fish Commission gave the lake a booster shot, another million walleye fry.

The survival rate evidently was exceptional. After 18 months it was possible to catch nine-inch walleyes on almost every cast almost anywhere in the three-miles long lake, on any type of lure or bait.

By this coming January, a majority of the walleyes in Tamarack will finally reach and exceed the 15-inch minimum measurements required by the Pennsylvania Fish law.

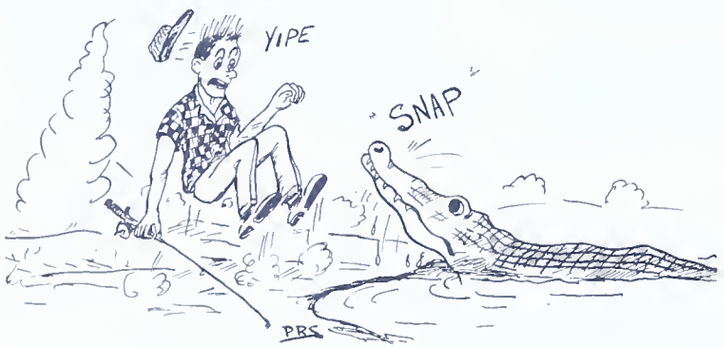
Hot walleye fishing for the cold winter days of January, February and early-March is clearly indicated for Tamarack Lake. Grab a bucket of 3 or 4-inch minnows, your ice spud or auger and try Tamarack this winter. There should be plenty of walleyes waiting to be caught!



FISHERMEN'S CARS line one of the two access areas at Tamarack during the 1968 winter fishing season. The cooperative recreational project, completed in 1963, attracts a lot of fishermen to Crawford County each winter.

Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



ALLIGATORS?

■ Morgan Wood of Palo Alto was fishing Beaver Creek (also called Cold Run). He happened to see a strange object in the water and young Morgan thought it was an alligator. He told his father about it but, of course, dad didn't believe it. Young Morgan saw it twice more while fishing so finally his father went to see for himself. Sure enough there it was—an 8 inch alligator. Just about anything can happen when you go fishing in Schuylkill County! —***Waterways Patrolman JAMES F. HAZEN*** (Schuylkill County).

TASTY "GOLD FISH"

■ This fall, while on patrol of Lake Erie, I arrested a fisherman for fishing without a license. He said it was the first year that he had heard about the walleyes being caught in Lake Erie, and wanted to see for himself if the fishing was as good as he had heard before buying a license. After buying a license he returned home that evening with two walleyes and invited his mother over to have a fish dinner. His mother declared that they were the best fish she had ever eaten. The fisherman's wife quickly spoke up and said they were gold fish. The fisherman disagreed and stated that he had caught them and knew that they were walleyes, not gold fish. His wife replied, "They might be walleyes to you, but I found a receipt in your pocket that you paid $25.00 for fishing without a license. These fish are gold fish!"—***Watercraft Safety Officer NORMAN ELY*** (Erie County).

U.F.O. (Unidentified Floating Object)

■ Late one evening Deputy Steve Wasler and I were on motorboat patrol of the Ohio River. Dead ahead we saw what appeared to be a smoldering charcoal grill, or perhaps the tail end of a sinking outboard. Several pleasure boaters were circling the area and keeping a safe distance from the object. As we came closer, a large cylindrical shaped, silver colored, tank was floundering in the water. Steve joked that it might be an old Japanese torpedo left over from World War II. Actually it was a 100 pound bottle of propane that had tumbled from a barge tow. After quite a struggle Steve and I wrestled the tank into the boat and delivered it up river to a very grateful tow captain.—***Waterways Patrolman DONALD PARRISH*** (Beaver County).

CROSS BREED

■ Recently while assisting with a live fish exhibit at the York County Fair I overheard a small boy ask his father the origin of the hellbender which we had on display. The father, being more familiar with salt water fish than with fresh water, told him that the hellbender was a cross between an alligator and a musky. He then went to great effort to point out his reasons; it had the long tail of the alligator and the mouth and gills of a musky!—***Waterways Patrolman PERRY D. HEATH*** (Cumberland-Perry Counties).

ALL SUMMER—

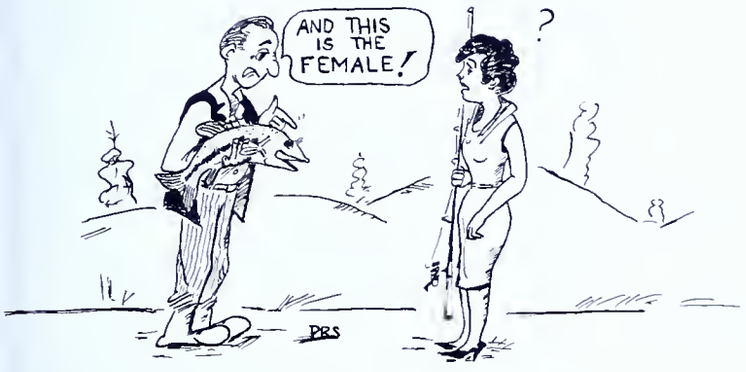
■ At the Allegheny Fair in South Park last summer a lady walked up to the booth and picked up an information sheet about how to catch fish through the ice. She quickly placed it back on the counter and said, "Oh, no, he fishes all summer now!"—***Waterways Patrolman DONALD PARRISH*** (Beaver County).



"THEY'RE WARDENS!"

■ While on routine patrol of Pike County, accompanied by Waterways Patrolman Badner, we came upon a camp dump where two black bears were feeding. As we approached the dump, we noticed two carloads of people sitting in their cars watching. Mr. Badner and I parked our car, got out,

and walked up to within a few feet of the bears so I could get a good close up picture. By this time the other people had gotten out of their car and a worried woman said, "Oh my heavens, look how close those men are going to those bears." Her husband turned to her and irritably said "don't worry. The bears won't hurt those men, they're wardens!" —*Waterways Patrolman* ***JOHN STEPANSKI*** (Dauphin County).



"THEY'RE FEMALES!"

■ A local veteran angler was being bothered by a lady angler who was very new to the sport. She kept asking all kinds of questions. When she finally asked what the difference was between big mouth bass and small mouth bass the veteran angler thought a minute and had his answer. "The big mouth bass are the females," he said!—*Waterways Patrolman* ***RAYMOND HOOVER*** (Tioga County).

NEEDED CONVINCING

■ Having introduced the muskie in Mifflin and Juniata Counties waters I let it be known that when they reached legal size I would like to secure heads for display in my office. Through the generosity of Mr. William Swineford of Lewistown (who landed two during the summer) and Mr. James Yetter of Port Royal (who landed three), I got the heads. Then, Mrs. Frank Kupper of Lewistown (whose husband also landed one), very graciously offered to dry and stretch them for me. Being especially enthusiastic about the success of the muskie program in the area, I decided to use these mounts for display at the Juniata County Fair. You just can't imagine the comments received—seems folks just didn't believe this terrific game fish was being caught locally. Many, many people insisted they just had to come from Canada and it took a lot of talking to convince them otherwise.—*Waterways Patrolman* ***RICHARD OWENS*** (Mifflin-Juniata Counties).

DISAPPOINTED—

■ During an in-season stocking at Bradys Run Lake, a small boy asked, "Are you giving away any free ones mister?" I replied, "No son, I'm not." Another lad chimed in, "We should have brought a net." Taking the cue, still another little fellow jumped in and scooped up a nice trout with a landing net. I calmly said, "Hey that's against the law." The boy's face turned a brilliant red as he disappointedly returned the fish to the water.—*Waterways Patrolman* ***DONALD PARRISH*** (Beaver County).

UPPER WOODS SURPRISE

■ The kokanee salmon in Wayne County's Upper Woods Pond created a lot of good fishing this past summer. Fishermen from all sections of Pennsylvania, as well as Maryland, Virginia, West Virginia, New Jersey, New York, Maine and Ohio converged on the area. Few weekends that went by without somebody getting plenty of kokanee. But you should have seen the surprises when some tangled with—but didn't land—the lake's tackle busting rainbow.—*Waterways Patrolman* ***HARLAND F. REYNOLDS*** (Wayne County).

FAST SWIMMER?

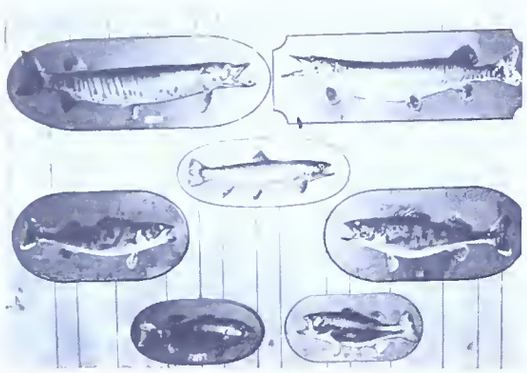
■ Layne Cober, 12, tells me this story: He and his aunt were fishing in the Raystown Branch of the Juniata River in the vicinity of Lutzville about three to four miles upstream from his aunt's house. He was using a Colorado spinner when a nice sized fish took it. He set the hook and brought the fish to within three feet of the bank when it suddenly broke away, taking his spinner. Disgusted Layne returned to his aunt's house. He dug a few worms and went fishing below the house. Once more a fish hit his bait but he succeeded in landing this one—a large fallfish. To his amazement he found a Colorado spinner hooked in its mouth. He said it looked exactly like the one he'd just lost.—*Waterways Patrolman* ***WILLIAM E. McILNAY*** (Bedford and Fulton Counties).

WHERE NOW?

■ This summer I spoke to a group of boys from the heart of New York City. They had never been out of the big town. They had no idea of what a grasshopper was, or a crayfish, or any insect life of any kind. During the talk, the subject of rattlesnakes was brought up. All very interested, as they had been warned about their presence. One boy asked if they were around at night and, of course, we told them that on warm nights they moved around. As it was chilly this night, one little boy quickly asked where they were sleeping now.—*Waterways Patrolman* ***KENNETH ALEY*** (Potter County).

HARDER CHEWING AHEAD!

■ I have a small pond on my property. Each year it drops about six inches, so I decided this summer to place some one-inch plastic pipe in the stream that borders the pond and run water into it. I put about 100 feet of pipe down, admired my new found flow of water, and went away for several days. When I went to check on the amount of water that had come in I found the pipe was not full, in fact it had quit running altogether. I started to check the pipe and found the upper end had been broken off about 15 feet from the end. I looked closer and found that some neighboring beavers had chewed the pipe off. I replaced the broken pipe and again went to the pond to see my handy work. Still no water so I went back to the upper end and checked again. As I checked farther downstream, I found five locations, all 15 to 20 feet apart where the pipe was chewed in half. I wonder if the beavers think they're the only ones that have a right to use that water! I have given up until I get metal pipe. Then we'll find out how sharp their teeth are!—*Waterways Patrolman* ***JOSEPH E. BARTLEY*** (Pike and Wayne Counties).



SEVENTY FOUR POUNDS

by WALTER LAZUSKY, *Assistant Supervisor, Region III*

Not far West of Meshoppen in Wyoming County along Route 6, and close to the Susquehanna River is a place called the "Trail Inn," operated by fisherman Edmund Young, the Inn has become a gathering place for local Anglers. When the outsiders stop for the first time the first thing that immediately attracts their attention is the massive array of mounted fish displayed on the wall—muskies, trout, walleyes, and bass. Young says he will take bets on the first words the stranger will ask. "What part of Canada were those fish caught?" is the standard opener. At this point Young leads his amazed patron to the window and points to "Myo Beach" on the Susquehanna River only a short distance away.

Myo Beach is a settlement of summer cottages, although some people reside there all year. Living there are anglers such as Ed Alexis, Leonard Strazdus and James Daily along with other full time residents who have migrated up from the "Big Valley" (the Scranton and Wilkes Barre area). Some of these men were forced into an early retirement because of anthrasilicosis or "Miners Asthma" they contracted while working in the hardcoal mines. The river and the beautiful surroundings give them a great deal of comfort and relaxation and many spend a lot of time enjoying their favorite sport—fishing.

Ed Alexis catches a lot of the fish in the Myo Beach area. His biggest were a 42 inch muskellunge, weighing 18 lbs.; a 30 inch walleye weighing 11½ lbs.; and another walleye 28 inches long, weighing 8 lbs., 6 oz.

Charlie Kashuba, of Meshoppen boasts a muskie bigger than Ed's. It weighed 19 lbs., 14 oz.

John Bendock, garageman of Laceyville caught a 5 lb., 6 oz., smallmouth bass in the same hole trolling with a minnow. Charlie's friend, Bill Pickett assisted by netting the trophy fish. In the nearby Meshoppen Creek, Art Kemler landed the 5 lb., 8 oz., brown trout and Sam Smith landed a 5 lb., 14 oz., large mouth bass on a jitterbug.

Anyway they all add up to seventy-four and a half pounds of tackle bending fishing pleasure—all taken just a few hundred yards away!

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The Mysterious Mon

in the muddy floor of the Mon near where it had gone down.

These "detectives" further believed the aircraft had sunk completely in the mire, defeating any attempts at dragging or sounding.

Some others believed the Mon to have a solid bottom, ruling out that "muddy" theory.

The Army Engineers, taking into account the strong current, then guessed the powerful waters swept the plane downstream—even as far as the Emsworth Dam, a distance of 12 miles.

"We just don't know," said a puzzled Army official with hardly a clue to go on.

A third theory was that the plane had slipped down into a deep hole in the river bottom, also frustrating dragging and sounding efforts.

Most agreed the plane remained in one piece. No broken sections had been sighted. If the 16-ton plane had remained whole, the gates in Emsworth Dam would have prevented its passage.

Then one day the depth recorder signalled electrically the presence of a large object on the river bottom. A search was made, but it turned out to be a wooden barge which sank years before.

On February 15, little more than two weeks after the crash, the Army Engineeers suspended search operations.

It looked like the plane and the precise cause of the crash might never be found.

The weeks and months rolled by. Occasionally, someone would report seeing floating wreckage. These reports were always checked out, but to no avail.

Then the two missing bodies were found, one on April 8, 1956, and the other on May 28, 1956.

News items concerning the mysterious disappearance of the B-25 appeared far less frequently.

By the following December the Air Force had just about given up solving the mystery. It sold the salvage rights to the $200,000 airplane for $10.

The salvage operator found many things, including another sunken barge, this one loaded with scrap. He did not, however, find an airplane.

To this day the mighty Mon has not revealed where her treasure lies.

Most people have forgotten about the lost B-25. But occasionally, on the anniversary of the crash, the newspapers dig through their files and reprint the story of the crash and the airplane that has never been found.

COHOS ARRIVE!

A tremor of excitement swept through northwestern Pennsylvania early this fall as an estimated two thousand coho or silver salmon returned from Lake Erie on a premature spawning run.

Nearly all of the fish returning were precocious males running from 12 to 20 inches—but they were a year ahead of the rest of their class and were only a small part of the thousands of fish released last spring in tributaries leading into Lake Erie. But their early return proved one thing—they found plenty to eat out in the big lake and, barring unforeseen circumstances, next year should see the rest of the run return with possible sizes up to 12 pounds!

Fishermen getting a headstart on coho fishing in the Keystone State fished for and caught many of these scrappy salmon and reported them exciting to catch and "delicious" eating.



PENNSYLVANIA FISH COMMISSION Executive Director Robert J. Bielo and Assistant Director in charge of Fisheries Gorden L. Trembley examine one of the first coho salmon to be picked up on the 1968 run. This fish was 17½ inches when caught early in September!

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FISHING IN PENNSYLVANIA



dium action bait casting rod will handle a large variety of bass plugs and would be a good choice for the beginner. Medium action rods average around 5½ to 6 feet in length. A rod with a much heavier action would be needed to handle the heavy musky plugs that weigh up to several ounces.

BAIT-CASTNG REELS

The most critical piece of equipment in a bait-casting outfit is the reel. The nature of bait-casting demands a reel that operates with a high degree of mechanical efficiency and a poorly constructed reel will not measure up to this requirement. A well made bait-casting reel is well worth its price—especially at night when consistent snarling of lines could very well ruin your fishing fun.

Most casting reels are equipped with a level wind device and an anti-backlash mechanism. These are essential on any casting reel. Free spool reels that pay out line with the handle disengaged are available. Many reels are equipped with a star drag device that allows the line to slip before the breaking point is reached. These last two items are optional but are recommended if you desire the best.

The backlash has always been the biggest trouble for the baitcaster. Backlash results when the reel spool runs at a greater speed than the line. The spool overruns, the line stops quickly and becomes tangled, with the fisherman left to spend valuable fishing time trying to untangle the line. Modern bait-casting reels, with anti-backlash devices and free spooling, have all but eliminated this difficulty.

BAIT-CASTING LINES

The two most popular types of line for the bait-casting outfit are braided nylon and monofilament. If you plan to use monofilament, you must be sure your casting reel has been designed for monofilament. A spool with too much space between it and the reel housing will allow the fine line to slip between and tangle in the gears.

Braided nylon line is recommended for the beginner with fifteen pound test being suitable for all around fishing. Musky fishermen may prefer twenty or twenty-five pound test line. Color seems to make little difference, but black has always been the most popular.

PART TWO NEXT MONTH!

The Sea Bag

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters

GOVERNOR'S CUP REGATTA

Jack Elfman, of 93 Tower Hill Rd., Doylestown, proudly returned home with the Governor's Cup following the annual two-day regatta staged last October on the lower Susquehanna River at Long Level.

This was the third Governor's Cup regatta, held for Lightning Class sailboats only, by the 100,000 Pennsylvanians for the Promotion of Economic Growth.

The two previous events, 1966 and 1967, were both won by Bob Adams, of Glenside. Adams came in fourth this year.

Elfman, who has 10 years of sailing experience, had as his crew his wife, Patty, and Hickman Rowland, of Philadelphia.



JACK ELFMAN, of Doylestown, second from left, receives the Governor's Cup from Joseph W. Barr Jr., Secretary, Department of Community Affairs. Barr represented Gov. Raymond P. Shafer and the 100,000 Pennsylvanians for the Promotion of Economic Growth. On the extreme right is Dale Eyster, Commodore of the Susquehanna Yacht Club, which served as host for the third annual event; and on the left is Melvin S. Gardner, regatta chairman.

Once again the Susquehanna Yacht Club served as host for the event and one of its members, Starling Mikell Jr., of York, placed second; and Carroll Streetor, of Swarthmore, came in third.

About 30 Lightning skippers and their crews, from all sections of Pennsylvania, turned out for the '68 event and, as usual, the two day affair ran afoul of foul weather. Foul, that is, for sailing.

Actually the weather was fine. Power boatmen couldn't have asked for anything better. There was plenty of water, skies were nearly cloudless, the mercury was in the 70s and the maple trees along shore were beginning to take on their various autumnal shades of yellow, orange and red, all reflected in the glassy surface of the river.

While this is ideal weather, it's definitely not what the sailboater is looking for and this is what the Governor's Cup matches have been up against since they began. Weather-wise, I think the matches are jinxed.

As in previous years the weekend before last Oct. 12-13 turned out quite blustery. There was wind and plenty of it, and the same can be said of the Sunday following the races.

Oh well, there's always next year!

NEW LAKE

One of the finest inland lakes, designed specifically for the fisherman, canoeist and sailboater, is the new lake now forming at the Codorus Creek State Park, southeast of Hanover, along Rt. 216.

Although still not filled to capacity—it is expected to reach this point by next year—the lake has already been in use for the past two or three years. Temporary mooring, launching and sanitary facilities were provided during the summer of '68 and weekends found plenty of small craft on the water.

Naturally on a lake devoid of water skiers, or hot-rodders zooming about trailing king-size wakes, the major area of interest is in fishing and already, although stocked only a few years ago, some mighty fine specimens are being taken.

The lake was stocked with muskies, northern pike, walleye, bass and even catfish and crappie. So if the game fish aren't hitting, there's always a good chance to take home a string of pan fish.

Reached via Route 216, and located about four miles from Hanover, when filled to capacity the reservoir will cover some 1,275 acres. Its minimum recreation pool will be about 800 acres.

The lake, serving a drainage area of 39.8 square miles, will be about four miles long with a series of coves, or fingers, extending in all directions up to two or three miles long. It has a shoreline of 26 miles.

Thus it's ideal fishing water with plenty of room for small fishing craft, pontoon boats, of which four were moored there permanently during the 1968 summer season with others trailered in; sailboat owners and canoeists who will find here just what they're always searching for—a place to relax and enjoy one's self away from the noise and hustle bustle of traffic.

Incidentally outboard motors are permitted up to 6 hp.

CALENDAR OF EVENTS:

Jan. 22-24: National Boat Show at the Coliseum, New York City, N.Y.

Feb. 1-9: Chesapeake Bay Boat Show, 1st Regiment Armory, Baltimore, Md.

A CHANCE FOR FUN--

by
NICK SISLEY

LOCAL SPORTSMEN'S CLUBS are often involved in various civic activities. They may range from money-making ventures to improve club grounds to a simple picnic for the kids. The latter is the sort of project the Apollo-Spring Church Sportsmen's Club has been involved in the past two summers.

The small village of Spring Church boasts a Cerebral Palsy Clinic. Many children from Western Pennsylvania afflicted with this disease are treated here. In cooperation with Clinic personnel, the Sportsmen's Club has opened their lake, farm, and picnic grounds for a picnic day each summer. The clinic brings a picnic lunch and soft drinks for the kids. The Sportsmen bring themselves and go all out to show the kids a good time.

Their fifteen acre lake holds pan fish, bass, catfish, and stocked trout. Members bring spare fishing rods, help tie knots, fetch worms, and demonstrate casting techniques. The kids all go for the fishing. Many are trying it for the first time.

Boats are permitted on the club lake, but motors are prohibited. Not so for this special occasion. The club has a sturdy wooden boat, and it is fitted with a small outboard. All the youngsters are given a boat ride—secure in life jackets, of course. For many, it's their first boat ride. They're wide-eyed with apprehension to start, but once used to it they never quit smiling.

When a young boy or girl catches a first fish or takes a first boat ride, they wear a smile a yard wide—affected by cerebral palsy or healthy, kids react the same way.



MANY OF THE CHILDREN visiting the lake have never fished or had a boat ride before. Their first outing is an exciting one—and rewarding for the club members who help make it a success.



continued from page 13

THE CADDIS PATTERN

made. Gordon also discovered that the fly, when submerged, was enveloped in a silvery air bubble. This phenomenon is undoubtedly brought about by the roughness of the insect's body and by the short, fine hairs on its wings, all of which form an air space around the fly on contact with the water.

Fishing a dry fly under the surface is an act of sacrilege to the purist; yet, it is the dry fly with its stiff hackles which produces the most prominent air bubbles when submerged. Add a rough-textured body dubbing and you have the ideal bubble-maker.

Once I was fishing Penn's Creek when a great many caddis were both in the air and on the water. I had located a good brown trout feeding beside a log and I could plainly see him darting to right and left just under the surface, making a swirl each time he took a fly. I floated a caddis dry over him many times, both as a free drift and with a twitching retrieve, but he paid scant attention to it. Finally I unintentionally twitched the fly too hard and it ducked under the surface. There was an immediate swirl as the brownie took the fly and he was eventually landed. I didn't deserve that trout but he taught me a lesson which was later explained in Sid Cordon's fine book, HOW TO FISH FROM TOP TO BOTTOM.

The Cinnamon Sedge is a caddis common to many of Pennsylvania's trout streams and the trout are fond of it. The imitation shown in the photo-illustrations works well both dry and wet, as the occasion dictates, and the method of tying can be used for any caddis imitation. The use of a thin coating of vinyl cement on the turkey quill wings improves the durability of this fragile material without stiffening or warping it as would a hard-drying lacquer or cement.

MODERN CAMPING

by DEL & LOIS KERR

IN THESE CHILLY GRAY DAYS of early January with snow occasionally softly spreading its white blanket over the ground, few Pennsylvania campers will be planning a trip within the next month or so. It's pleasant though to recall the wonderful experiences shared during the past season and to begin, even this early, to make plans for next summer's camping trips.

Perhaps some Angler readers have received their first camping gear during the holidays and are looking for suggestions on where to go and what to do. For that first trip next spring we'd recommend a private campground where you can make advanced reservations and be assured of a spacious campsite without having to depend on the "first-come, first-served" basis of any of the more crowded state parks.

Last summer we became familiar with a spot that we'd highly recommend to the fisherman-camper whether novice or veteran. Beech Hill Camping Area is located only a few minutes, by car or by foot, from Beechwood Lake in Tioga County, one of Pennsylvania's northern tier vacationlands.

Located on top of one of the rolling hills for which this section of the state is famous, the campground offers, without a doubt, the most fabulous panoramic view of any campground we have visited. From the mountaintop you can see a rolling vista of hills and lush green farmlands in all directions.

Beechwood Lake is a 60-acre impoundment maintained and operated by the Pennsylvania Fish Commission to provide fishing enjoyment. The nearby lake can provide some excellent fishing for the campers. Included are trout, bass, pickerel, pike, sunfish and catfish. Ample parking facilities are provided as well as a boat-launching area. Motor boats are not permitted. Clean sanitary facilities are provided. The lake is located off Route 349 at Sabinsville.

Beech Hill Camping Area is located nearby on a hilltop.

There are sites for approximately 45 camping families, most of them in wooded areas with others around the perimeter of a field on the very brow of the hill. When we visited the area last year, the owner was in the process of building additional sites and roads.

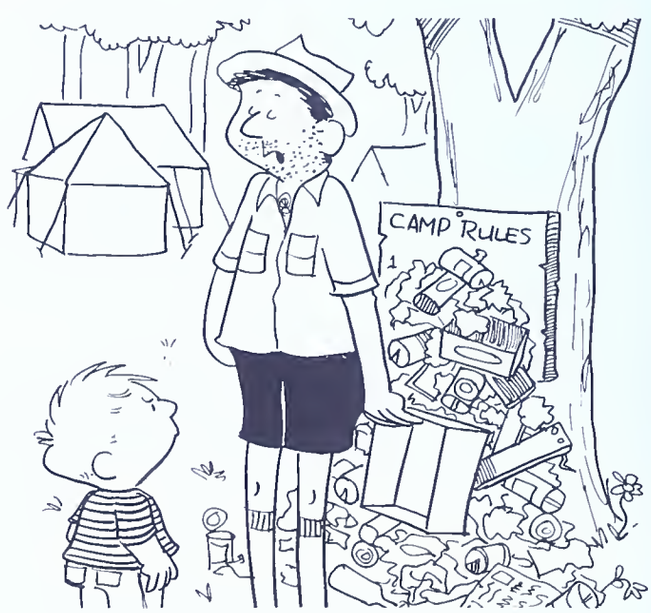
It's open from May 15 to October 15. Rates are more reasonable than most private camping areas and comparable to those charged in state parks. Electricity is available for a slight additional charge. Ultra-clean pit type toilets and hot showers are also provided.

Playground equipment for children and a field for playing ball are centrally located. The lake is within easy driving or walking distance for those wishing to fish, but far enough away that there is no danger of the little ones wandering too close to the edge. Campsites are provided with picnic tables and iron fireplaces with grills for wood-fire cooking.

A grocery store in nearby Westfield handles camping supplies as well as bait. Churches and a theatre are also located in that village. As you sightsee the country roads surrounding Beech Hill, chances are good that you will see abundant wildlife, as deer, turkey and even black bear frequent the region.

A "must-see" while in the area is the cooperative fish hatchery of the Potter County Anglers Club. Follow Route 349 from Beechwood Lake, turning west on Route 6. In Galeton take Route 299 and follow the signs to the hatchery. This anglers' club, in cooperation with the Pennsylvania Fish Commission, has been successfully rearing trout for a number of years.

Sizes of the fish in the many pools run from fingerlings to some real whoppers 24 inches and up, many of them going five pounds. These fish are stocked in local streams each year in time for the opening of trout season. All varieties of trout are reared including the new hybrid, the golden palomino. This offers many fishermen their first view of this new game species as well as a lot of other delightful sights.



"WHAT RULES, KID?"

continued from page 11

ICE FISHING

Old hands at this winter game know that standing around on the ice for most, or all, of the day can grow tiring. They therefore may include folding chairs, stools or benches, or improvise one from a bucket in which their gear is stored. Those of wood are warmer to sit upon than those of metal. Kapok filled boatseat cushions tossed onto the ice are comfortable seats providing the surface ice doesn't thaw and become watery during the day.

There are many home-made seats and wind-breaker combinations. Typical of many seen on the ice is one that consists of a box made from lightweight plywood, fitted with straps for carrying pack-style. The box stores fishing gear as well as a collapsable canvas shelter and supporting rods which set up around the box to shield the fisherman from the cold. Because few or none are currently on the market, you'll probably have to build you're own.

The foregoing pretty well covers tips and techniques which novices need to know when starting this winter sport. One thing stands out clearly. Except for the traditional line, hook and bait, winter gear differs radically from that used during summer. And most of it is improvised by the angler. One often sees some pretty odd looking gear in the winter, but however odd, it rarely attracts more than a passing glance from the crowd. The accent is on fishing, catching fish and meeting your fellow outdoorsmen. And newcomers should be reminded to dress warmly.

Pictures shown on these pages call attention to the more popular, and what might be called the basic pieces of ice-fishing tackle. Lacking this, make do with what you have. Get up enough nerve to try this winter sport once. Chances are pretty good that it will capture your interest as it has so many other anglers in Pennsylvania during recent years.



AWARD MADE

JACK STEPANSKI, a recent graduate of the Pennsylvania Fish Commission's H. R. Stackhouse Training School and now Dauphin County Waterways Patrolman, was given the "Captain Tony Conservationist of the Year" award at a banquet of the Delco Anglers and Conservationists last summer. Presenting the award to Stepanski (center) is Tony Marcellus, left, and Rube Reed, right, an active club member.

continued from page 2

LEAKY BOOTS

trout. I think browns would be better suited, although rainbows would probably work too.

The Loyalsock in its day was a wonderful trout stream and I believe with stream improvement projects, change in size and limit, it could be changed to a better stream and the high pressure wouldn't hurt it so much.

This is only my idea and I don't know much about the scientific aspect on this. I certainly would like to know the Commissions' views.

John Weeks, Williamsport

Truek following is not something new or peeuliar to the State of Pennsylvania. Every trout stocking state in the Union with a fair human population has the problem of truek following. This aspeet has been diseussed and debated at every fishery meeting that was ever held. Nobody has eome up with an aeeeptable answer.

I am sure that stocking at night is not the answer. Can you imagine the problems involved in stoeking 21 miles of Loyalsoek Creek after dark only to have the fishermen gather for the "show" at daybreak. This is not an answer.

Just as winter is the time of greatest mortality for terrestrial animals, so it is also the period of heaviest mortality for trout because of extreme water temperature, anehor ice, and fluctuating water levels.

I don't objeet to the larger size limits if it is understood by *all* Pennsylvania fishermen that the number of trout to be stocked would be greatly reduced. Unfortunately, a good pereentage of our anglers eount the suceess of their fishing trip by the number of trout they catch. It may be quite unfortunate that not all the anglers think alike, then raising fish would be simplified.

There is no question about the Loyalsoek being a wonderful trout stream, and it is hoped that it will continue to remain a good trout stream and support many fishermen. However, the more fishermen it is called upon to support, the more fish we must stoek. This means an inerease in the number of stoeked trout, not a reduetion.

I am very proud of the faet that over the past ten years our hatchery trout have consistently been stocked at larger sizes. Thc Pennsylvania Fish Commission is doing everything within its seientifie knowledge to produec a larger fish. The fisherman problem must be solved by the sociologist and they still haven't come up with the answer.

Thank you for your comments.

Keen Buss, Chief
Division of Fisheries

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

FROM C. B. E., ALTOONA:

"Where can I get information on starting in the marina business?"

—Write the National Association of Engine & Boat Manufacturers, 420 Lexington Ave., New York, N.Y. 10017. They publish a series of books and pamphlets covering various aspects of marina design, construction and operations.

* * *

FROM G. F. R., BETHEL PARK:

"The engine in my 18-foot inboard drips a little oil, and this makes an awful mess in the bilge. I have tightened all visible nuts and bolts, but it still drips, although I only lose about a pint per season. What can I do?"

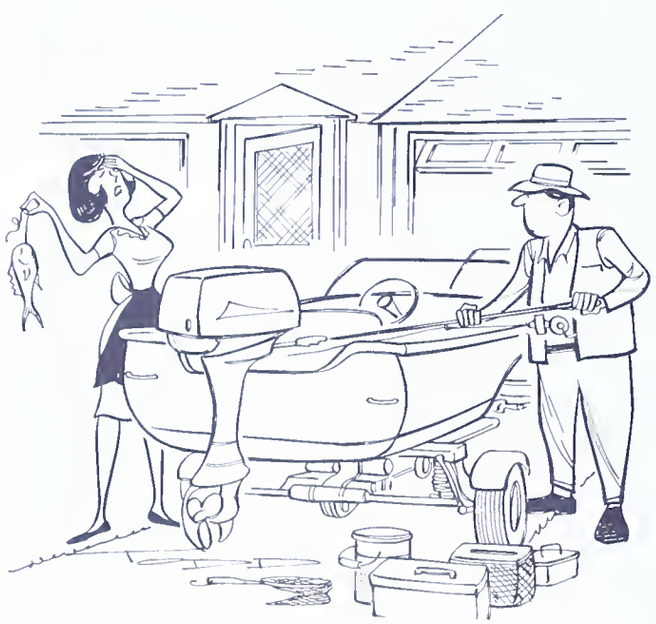
—This is a common problem, and the amount of oil you are losing does not indicate that an overhaul would be justified. Try the department and hardware stores for a metal or plastic pan that will fit under the engine and catch the dripping oil. If you can't locate one that will do, you can have one made at any sheet metal shop.

* * *

FROM A. J. P., PITTSBURGH:

"Can you recommend a good general reference book on the technical aspects of seamanship, suitable for a fairly knowledgeable amateur?"

—Two that come to mind are the "Merchant Marine Officer's Handbook," at $10.00, and "Knight's Modern Seamanship," $8.50, both available from the Cornell Maritime Press, Box 109, Cambridge, Md. 21613. Both are written from the viewpoint of the large vessel officer, but the information presented is equally valid for the pleasure boatman who wishes to learn some of the fine points of ship handling and management.



"CONGRATULATIONS, MR. $511 A POUND!"

* * *

FROM T. J. B., DERRY:

"I am interested in outboard racing; where can I get information on this sport, and on how to soup up my outboard engine?"

—Get in touch with Jim King of King's Outboard Sales, 7304 Grand Ave., Neville Island, Pittsburgh, Pa. 15225. Mr. King is prominent in the Three Rivers Outboard Racing Association, and specializes in converting outboard engines for competition.

* * *

FROM B. J. S., MERCERSBURG:

"The tachometer needle on my inboard runabout keeps jumping. Is there any way I can cure this without taking the instrument to a serviceman?"

—Disconnect the cable housing at the engine end, where it is more accessible, and pull out the inner flexible cable. Coat this well with graphite grease, and replace it, being sure that you have the same amount sticking out as originally. Replace the housing connection, and your trouble should disappear.

* * *

FROM L. N. W., HOOKSTOWN:

"Recently I purchased a boat with a Commodore outboard motor, and none of the dealers I have called knows anything about it. Where can I get parts?"

—The Commodore was built by West Bend, which was purchased by Chrysler Corp. Write to Chrysler Outboard Corp., Hartford, Wisconsin, or check with your nearest Chrysler outboard dealer.

* * *

FROM T. M. C., WASHINGTON:

"If my boat was built before the new regulations on ventilation went into effect, can I be required to install more cowls and ducts to comply?"

—Yes, and the popular argument that such a rule is illegal because of its retroactive effect is incorrect. The rule does not make the existing boat illegal of itself, but requires additional safety equipment for its continued use in navigation. Unless you have suicidal tendencies, you should need no urging to improve the ventilation system on your boat so as to reduce the chances for a dangerous accumulation of explosive vapors in the bilge.

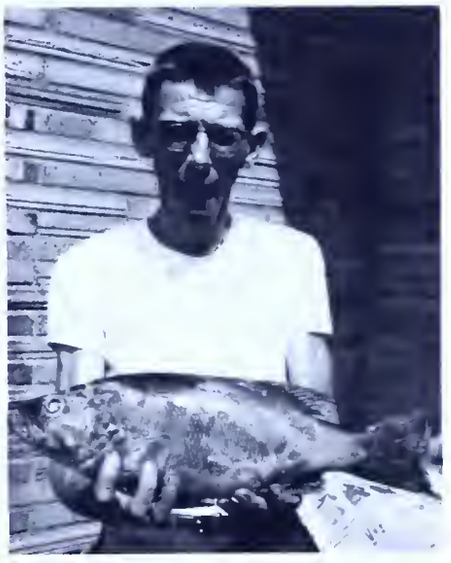
FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



LEFT—PERKIOMEN CREEK in southeastern Pennsylvania provided some excitement for fisherman Earl Huber Jr. of Rahns when he hooked and landed this 37½-in., 15-lb., muskellunge. He was spinning with a rebel plug and using eight pound test when he landed it early in September.

RIGHT—ANGLER CITATION winner Alva Coffman from Uniontown also tied for first place in the Genesee Brewing Company's fishing contest when he landed this 20½-in., 4¼-lb., smallmouth at Youghiogheny. He was spinning with a Creek Chub "Plunkie" when it hit.





ANGLER JOHN SKIRO SR. of Wilkes Barre holds 22¾-in., 6¾-lb., largemouth bass he caught at North Lake in Luzerne County in September. He was using a rapalla when it struck.



BIG SMALLMOUTH was landed by New Kensington fisherman Robert Solomon while he fished the Allegheny River. It measured 20½-in., weighed 4-lbs., 11-oz., and won him a Fishing Citation.



BRUCE WEINMAN LANDED this nice walleye while fishing the Youghiogheny Reservoir this fall. It measured 22-in., and fell to the temptation of a nightcrawler. (photo courtesy U.S. Army)



ONTELAUNEE LAKE in Berks County accounted for this nice northern pike caught by Robert H. Frick of Fleetwood. He was spinning with a live minnow when the 37½-in., 11½-lb., fish hit.

YOUNG FISHERMAN Tim Perschke of Butler holds the big largemouth bass he caught late this summer while fishing Tioga County's Hills Creek Lake. It measured 19½-in., and weighed 4½-lbs. (photo courtesy Redwood Inn)



FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



FISHERMAN Lawrence Ziegler, Schwenksville holds a 40⅝-in., 16-lb., 15-oz., muskie while another he caught, almost as big, hangs in the tree behind him.



ROBERT MOORE, 11, of Pittsburgh holds a pair of bullheads he caught at Lake Onedia in Butler County. The bigger, 14-in., 1¾-lb., won him a Junior Angler Citation.



BROTHERS TIM AND DREW Snavely of McKeesport had good luck last spring at Edinboro Lake. They're shown with their catch of panfish they caught with those two traditionally successful pieces of equipment, worms for bait and cane poles.



13-YEAR-OLD Bradley Barter of Hummelstown won a Junior Angler Citation for his 27-in., 7¾-lb. carp catch from Swatara Creek in Dauphin County.



11-YEAR-OLD Daniel Sweigart of Chadds Ford won a Junior Citation when he landed this 18¾-in., 2-lb., 2-oz., brown trout from Cedar Run.



FISHERMAN Sidney Kleeman of Broomall won a Pennsylvania Angler Citation for this 15¾-in., 1¾-lb., crappie he caught in Springton Reservoir.



CAMP HILL fisherman Jim Viani holds 25-in., carp he landed from Conodoquinet Creek. Spin gear and night crawlers landed the 4-lb., catch.



JOSEPH KRYSKO of Scranton holds the 21-in., 5-lb., largemouth bass he caught at Acre Lake this summer. It fell to the temptation of a green popper.



8-YEAR-OLD Chip Smith of Sharon holds the 26-in., 4-lb., northern pike he landed from the Shenango River.



HENRY GIRSSINGER OF ETTERS was the fiftieth fisherman to win Honorable Mention membership in the Husky Musky Club this year. He caught this musky in the Susquehanna River. It measured 36½-in., and weighed 13-lbs., 9-oz.



BILLY PONSONBY of McKeesport holds a 23-in., 4-lb., channel cat he caught from the Allegheny River this summer. He was fishing at Lock Seven at Kittaning when he landed it. The 8-year-old angler used a three inch chub.



FISHERMAN John Naniewicz of Eynon had some good luck on Lake Wallenpaupack early this year with the perch. Here he holds a stringer of 12 to 14 inchers he caught during one trip. He was using worms when the catches were made.



YOUNG LADY PATTI STONER of Newton Hamilton holds two carp while fishing the Juniata River this summer. One measured 31-in., and weighed 15-lbs., 8-oz.; the other, 30½-in., and weighed 15-lbs. The 10-year-old angler was using spinning gear and a soft crab when they hit.



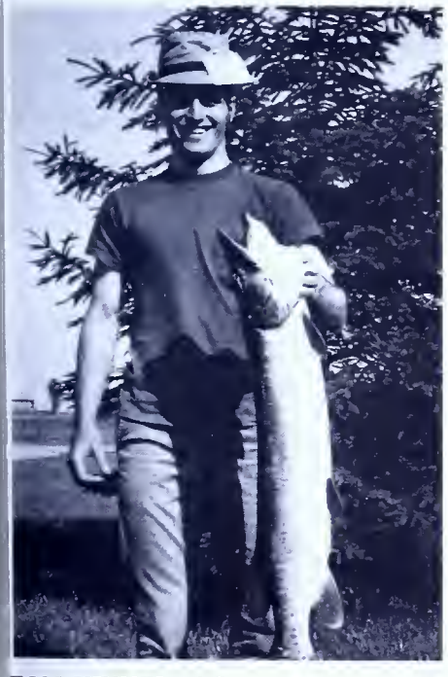
FISHING PALS Marty Avery and Glenn Levolent hold the 18½-in., smallmouth bass that won Avery a Junior Fishing Citation in August. The boys were fishing the Allegheny River in Forest County when the big smallmouth hit a nightcrawler.



HUSKY MUSKY MEMBER Alex Aversa won his membership when he landed this 45½-in., 22½-lb., musky from Canadohta Lake. The catch also won him a Pennsylvania Angler Fishing Citation. Aversa was casting with a creek chub plug.



UPSTATE angler Jeff Boughton of Susquehanna was fishing the Susquehanna River when he landed this 15½-in., bullhead. It took a nightcrawler.



TOM KINNEL of Somerset won a spot in Pennsylvania's Husky Musky Club this summer when he landed this nice 41-in., 16½-lb., musky, from Lake Somerset. He used spin gear and Beano plug.



CAROLINE SHARPVACK of Glassport holds one of the biggest muskies reported caught in the state this year. It measured 49½-in., weighed 32-lbs. She was fishing Sugar Lake when it struck a plug.



DAVID DAVIS of Alden holds a 21-in., 4-lb., 2-oz., bullhead he caught while fishing North Lake in Luzerne County. He was fishing with a creek chub. It won him a Senior Fishing Citation.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

COOPERATIVE NURSERIES may be located anywhere —in the cellar of an old farm house in Lancaster County, in a redwood trough on a McKean County hillside, or in a decorative reflection pool in Adams County. But for the sake of nostalgia, few can compare with the location of the Oil City Izaak Walton League's site on the grounds of the old Monarch Park in Cranberry Township, Venango County.

According to Jim Myers, chapter president, the park had a long history of picnics, band concerts and the like for the folks of the good old days. Streetcars made runs from Franklin and Oil City to the park. Formal gardens, nature paths and spacious lawns properly shadowed by ancient trees enhanced the scene. Then it came to an end in 1925. Times were changing; interests were elsewhere.



DENNIS MYERS, Paul Byers, Clarence Shearer, Greg Myers, Michelle Myers, and Jim Myers (IWL president) stand at the sign marking the way to the group's cooperative nursery project.

In 1926, the Oil City Izaak Walton League, Chapter 61, took over the park and renamed it Waltonian Park. A gradual transfer was made so that today bench rests, target ranges, skeet courses, a lake, and a cooperative nursery replace some of the flower gardens and lawns. New buildings, related to the outdoor sports, replace the old band shell and picnic pavilions.

More specifically, the cooperative nursery project began in 1965 when a circular waterway, formerly part of the scenic flower garden area, was utilized for a trout rearing project. Bob Brown, Cooperative Nursery Coordinator, was called in for some water testing activities. The end product was approval of the spring-fed, circular cement pond. The Oil City "Ike" Walton nursery was in business.

At this point Ted Kinch, grounds superintendent, enters the conversation. "It was and is an ideal setup. We have no temperature or oxygen problems and the construction of the pond permits us to section any part of it off like the spokes in a wagon wheel. We still keep some of the flowers growing in the center section just for old times sake." A wooden bridge crosses the waterway to the area referred to.

Doug Brown, one of the feeders, wanted to get back to the trout and away from the history. His method of attracting attention was simple. A handful of pellets brought clouds of young brook trout swarming to his spot on the bridge. "Aren't so big now—we've only had them a few weeks. Come back in May, when we stock them, and you'll see some fish."

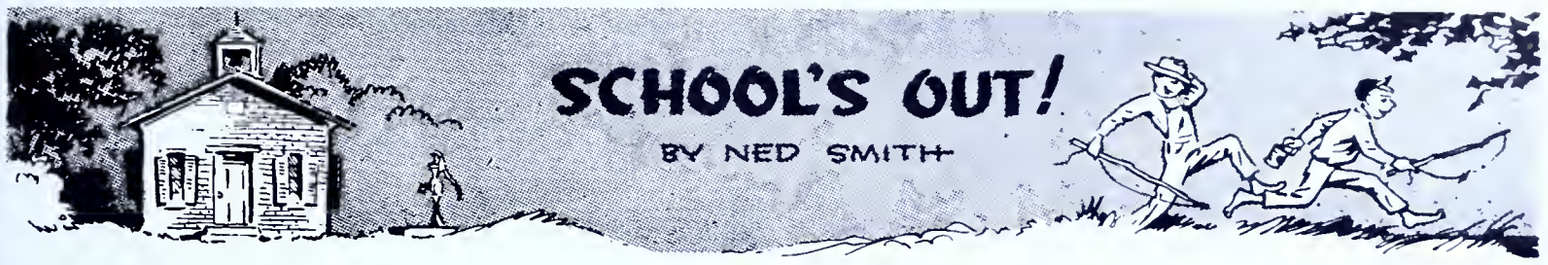
Then it was Jim Myers' turn again. "Doug's right. We get them in the three inch size and by stocking time—ten months later—we have them ranging from 10 to 15 inches. And that's not bad growth." And he's right; it isn't.

The club raises about 2,500 trout a year. Local anglers obviously benefit. Such streams as Cherry Run, Horse Creek, Mill Creek, Oil Creek, Sandy Creek, Sugar Creek, and Two Mile Run, all Venango County waterways, have or will sooner or later receive some of the Oil City Izaak Walton League fish.

About this time, Clarence Shearer, Waterways Patrolman for the district more or less put the finishing touch to the nursery visit by remarking that fishermen complaints about the size and quality of the trout being caught in the area were getting less and less, an indication of the improved activities of the Commission and the Oil City Izaak Walton League Cooperative Nursery.

But the story is not quite finished on this service-minded organization. In addition to the cooperative nursery, the club built a large lake, landscaped it, stocked it and set up some special uses for it. Fishing derbies for area youngsters, of course, were part of the program with a special event highlighting each year's activities. This special derby, known as "Big Daddy Day," is geared primarily to providing some yearly enjoyment for the Venango County Crippled Children. Members assist the youngsters; fish are caught and a good time is had by all. Need more be said?

In answer to the last question, actually no—enough has been said—but it does seem worth passing along one more fact about the Oil City Izaak Walton League boys. Although the cooperative nursery is a relatively new project with them, they have been in the business of serving their community for over forty years in the areas of outdoor sports and conservation projects. Truly they have been aware that the theme of *Casting with the Co-ops* is a way of life long before the phrase was coined for use in this magazine.



BONE UP ON NATURE



While you are making your New Year resolutions why not make a resolution to learn more about the out-of-doors, to add to your knowledge of the plant and animal life you meet when you go fishing? It's a resolution that is easy to keep, and your new-found interest in the things you see will turn even a fishless day into a memorable event.

The best way to learn outdoor facts is to spend your winter evenings with some good books. Your local library probably has many helpful volumes that you can borrow. Book stores and magazine stands sell excellent paperback books on nearly every nature subject. Additional free or inexpensive publications on a variety of outdoor subjects are distributed by many state agencies.

What's to learn? More than you might imagine. Take fish, for instance. There's not much excuse for not knowing a rainbow trout from a brown, but there are many veteran anglers who don't. A good book on fishes will clearly point out identifying characteristics—and answer other questions as well. You'll learn what is meant by a fish's lateral line, what is the purpose of the air bladder, what the catfish's "whiskers" are used for. You'll learn what a bluegill nest looks like, what water temperature walleyes prefer, where and when brook trout spawn.

No one who spends time on lake or stream can be unaware of the insect life, but it's not enough to merely know which ones should be swatted and which are harmless. Doesn't it make insects more fascinating to know that the dragonfly that perches on your fishing rod has 20,000 eyes and can fly sixty miles per hour? Wouldn't you like to know where to find caddis worms that build houses of twigs, leaves, sand grains, and pebbles? Are you familiar with the insect called the "backswimmer" which inflicts a painful bite, or with the ugly dragon-fly nymph which looks dangerous but isn't?

Birds probably have a larger following among humans than any other form of wildlife, and once you begin studying them you'll readily understand why more and more fishermen are becoming bird watchers. Even the most disinterested angler has noticed the kingfisher and the green heron which haunt small streams and ponds, and the great blue heron wading the shallows of larger waters, but most fishermen do not even know their proper names, much less know anything of their habits. Do you recognize the "fish hawk" or osprey when you see him? Have you ever seen him plunge into the water to catch a fallfish and do you know how he holds onto his slippery prey? How about the wild ducks that pass overhead in the spring and fall; can you tell the wood duck from the mallard or blue-winged teal? Can you identify the bird that builds its mossy nest on the timbers beneath bridges? Or the tan bird with a spotted breast that bobs and teeters on streamside stones? A good bird book will tell you all these things, and open your eyes to a whole new world of fascinating wildlife.

Fishermen are interested in catching fish, but to remain so absorbed in that pursuit that you ignore all of Nature's other treats is foolish. The mammals, the birds, the fish, the wild flowers, the trees, the insect life—these and others are much too good to miss.



END OF THE LINE

Nearly five years ago I began writing and illustrating this series of articles for young anglers. It's been fun, but unfortunately the press of other work has finally made it impossible to continue the series. With this installment "School's Out" will finish its run. Thanks for following it through the years. I hope my efforts have helped you become not only more skillful fishermen, but good sportsmen and knowledgeable outdoorsmen as well.

—Ned Smith

HAPPY MOMENTS

. . . can be yours in 1969 if you take time to enjoy some of Pennsylvania's numerous watersports—whether it's fishing a mountain stream, houseboating a picturesque river, or just tramping across a frozen lake.

And you'll find you enjoy it more when you know what's going on.

Discover what's going on . . .

. . . discover the Pennsylvania Angler!





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FEBRUARY, 1969

PENNSYLVANIA Angler

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the Keystone State's Official FISHING·BOATING Magazine...



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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



MIGRATION BLOCKS

Pennsylvania is linked to the resources of the Atlantic Ocean by two slender threads —the Delaware and the Susquehanna Rivers.

These great waterways once formed the pathways by which hundreds of thousands of American shad, herring and striped bass gained access to landlocked Pennsylvania.

Today but a small portion of the once great runs of American shad find their way up the Delaware River to historic spawning grounds. Even this remnant run is jeopardized by pollution and the tight control of heavy spring flows which are needed to lead the migrating fish up river.

However, the Delaware River with all the diversion to New York and the heavy interstate pollution loading of its tidal zone has not suffered a fate as absolute in terms of migrating ocean fish as has the Susquehanna River.

High dams, not pollution and diversions, form the barriers on this river that have barred any Pennsylvania benefits from the resources of the sea.

Certainly no one will quarrel with the purposes of these dams which block the Susquehanna at four points—three in Pennsylvania and one in Maryland. They hold back the river's powerful flow that it can be fed through turbines to produce much needed electricity. And we must be mindful that the matter of fish passage was not ignored by the pioneers of the electric power industry when the dams were constructed. The earliest dam located at York Haven was low and was clearly thought to be readily passable during high spring flows. The dam located at Holtwood, Pennsylvania in 1910 included a fishway at the powerhouse and later one on the opposite bank. Neither successfully passed shad.

We also must recognize that when the Conowingo Dam in Maryland was constructed the power company plans called for installation of fishways. Actually, a Federal conservation official of the time recommended the fishways be deleted as it was then considered that American shad would not use fishways at high dams. Later studies show these fishway plans were inadequate and would have had little chance of success.

Thus, with the complete closing of the Susquehanna River in 1928 to migrating fish there was no reason to include fishways at the upstream Safe Harbor Dam constructed in 1930.

At that time the possibility of workable fishways seemed remote, thus, Pennsylvania, Maryland and power company officials agreed to annual payments to the respective states in lieu of fishways. With this, one might expect the matter would have been put to rest.

Such has not been the case and for good and valid reasons we hope to reopen this important issue. Details of our findings and recommendations will be presented in this editorial column next month.

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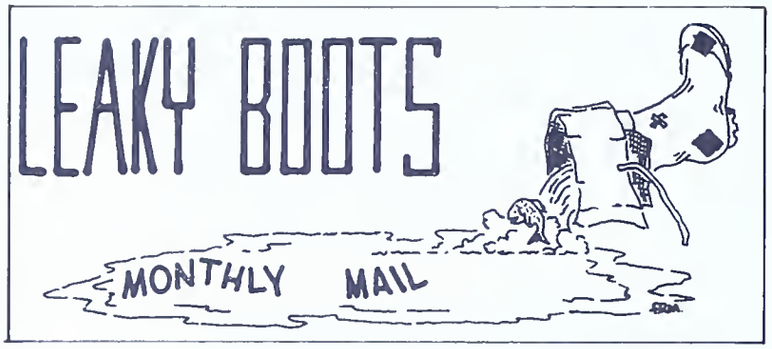
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Cover art/NED SMITH

D. THOMAS EGGLER, EDITOR

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JOLTED BY STREAM NOTE

Gentlemen:

I have been an ardent "Pennsylvania Angler" studier for a goodly number of years and cannot begin to tell you just how much pleasure I derive from $5 over a 3 year period. Suffice it to say that it is well worth it.

In all these years I've read little articles here and there in the Angler which move me one way or the other. None, however, gave me such a jolt as the Stream Notes note by Waterways Patrolman Francis Rotchford regarding the volunteers for an anti-litter patrol.

My aversion to streamside litter and those pigs who cause it is second only to losing my casting arm. I'm not one to hate another man, but I come very close when I observe some pig discarding beer cans, paper cups, bags of trash, etc. alongside and in a stream or public place. Oh yes. I have picked up after these people on countless occasions. I have also growled at men twice my size for their piggish behavior. But I continue and keep trying to do it the way I sincerely believe it should be done. It's a losing battle, you must recognize.

Therefore, I propose that you gentlemen empower your patrolmen to endow anglers, hunters, boaters, etc. along Pennsylvania streams and fields with the right and honorary legality to prosecute each offender whom he thinks is perpetrating some kind of aforementioned approbrium upon the people of Pennsylvania who care—perhaps by handing out a small printed leaflet, pointing out that, not only has he broken a law of his beautiful state, but has contributed to the wholesale destruction of the most beautiful state in America by his thoughtless action. Make up an honorary badge or pocket card for such people in the event they're challenged. Even a vest patch could help. I strongly believe that a pamphlet, or better still, a one small sheet admonition would serve to shame these thoughtless ones and make them realize what their actions mean.

It's probably a very fuzzy scheme at best, but if you believe it would do any good, I'd be willing to submit copy for such a project. Short and sweet—nicely but firmly to the point.

Jack Hunter, Willow Grove

The real "trash pigs"—the slobs who intentionally toss their garbage into a stream, over a bank, or along a road—probably would throw away the pamphlet you suggest also. They'll litter anytime they can get away with it and only when the law tightens enough so their littering costs them some cash will they be persuaded.

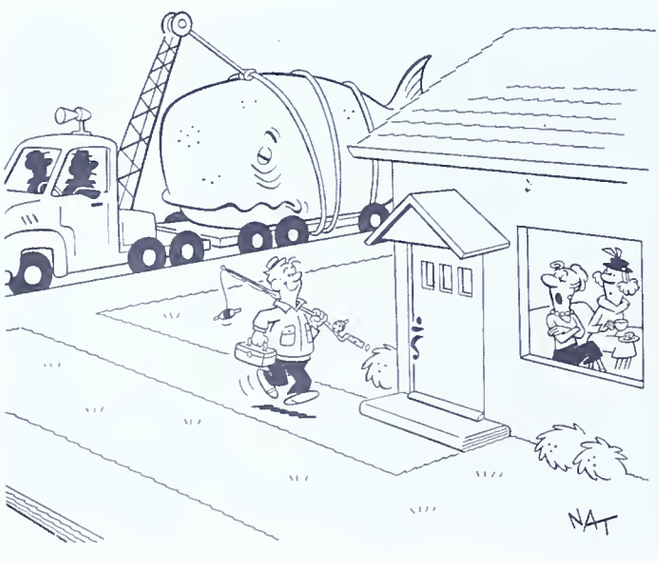
However, many of the litter problems of the country aren't caused by the "trash pigs" but rather by all those nice folks who get just a little careless because they think their "little" contribution of a candy wrapper or an empty cigarette pack "docsn't really matter."

The answer, of course, is that it does matter. The community in which they live and the country they use—and litter—isn't worth quite as much with all that rubbish on it. And the direct cost of hiring some government worker to pick it up is tenfold that of the slight trouble it might have been to have discarded it in some refuse container. Obviously these people—and the people who don't litter—will, sooner or later, get stuck with the bill for cleaning it all up.

Your suggestion and interest exhibits a growing awareness among many Pennsylvanians that it's time to bring a halt to the littering problems.

Keep growling!

—Tom Eggler, Editor



"HERE HE COMES WITH ANOTHER ONE OF HIS FISH STORIES."

COMMENTS—

Gentlemen:

I would like to comment on one of your letters published in your "Leaky Boots" section. It is the one titled "Different Viewpoint." First of all, I think this woman got the whole idea of the article titled "Unhappy With Fish Hogs" all wrong. She seemed to think the person who wrote it was serious about dumping the trout on the shore when actually he was being very sarcastic. She also seems mixed up in her interpretation of the idea of a trout stamp —the stamp would get rid of the meat fishermen and the people who aren't really trout fishermen. If she really likes trout fishing, why doesn't she help improve the streams to support more trout?

John Weeks, Williamsport

SUSIE'S TEETH—

Gentlemen:

I'm wondering how many holes there are in those leaky boots because over in Lancaster, Harry R. Diller, DDS, seems to think those boots are absolutely no good (Leaky Boots, July 1968). I am caused to wonder if the DDS

might mean "Destiny of Divine Sportsman." I don't reckon the Fish Commission is hand tied by any phase of the boating regulations.

There are those that desire such a coverage, but if that minority should get control of boating regulations, there will be "no more boat fishing." Any #!°?& fool that would try boat fishing would probably be drowned. Let the DDS fill Susie's teeth, but let the Fish Commission fill the streams with fish and have just a wee say about those boats.

L. F. "Shorty" Manning, Norwood

HAPPY EXTENDED SEASON!

Dear Sir:

This is a "thank you" note to the Pennsylvania Fish Commission for permitting trout fishing on Clover Creek in Blair County, until October 31 last fall.

I had some wonderful artificial fly and terrestrial insect fishing on this 17 mile stretch of water right up to the very last day in the most suitable weather of the year. Only a small group of ardent fishermen frequented the stream and all were very appreciative.

No additional stocking of fish made the sport a true challenge because the trout caught were very shy and streamwise, and this makes the best fishing.

If again in 1969 there is an extended trout season on some streams, we trout fishermen up here would like the Pennsylvania Fish Commission to again consider extending the season on Clover Creek.

James R. Sinclair, Altoona

MUSKIES "WORTH IT!"

Gentlemen:

Enclosed find my application for membership in the Pennsylvania Husky Musky Club with picture of same. Also find a picture of a 35½ inch, 10 pound, 2 ounce Northern Pike taken at Falmouth on March 9, 1968 on a yellow bucktail. I had a total of three muskies last spring.

I will be very pleased to receive my "Husky Musky Patch" as it was an established goal. Next I will be fishing for citation size.

Keep up the good work on musky stocking and they are worth the hours of fishing expended!

Iver M. "Smoky" Stover, Harrisburg

And your picture appears in the Fish Tales section of this issue, along with a number of other Angler readers who've landed some nice ones!

ELDERLY ANGLER

Last spring I was at Dutch Davis' Sports Store in West Middlesex, when a man drove up and came in to buy a fishing license. He asked Dutch to fill the application out for him because he had left his glasses in the ear, so in asking the questions Dutch asked for date of birth. This gentleman said he was born February 25, 1875—93 years old. He is Mr. Charles N. Heasley, R.D. 1, Pulaski. Mr. Heasley says he fishes the Shenango River from New Castle to the Pymatuning Reservoir and also goes to his cabin in the Pennsylvania Mountains to fish the trout streams.

William B. White, Pulaski

TIPS—

Dear Sir:

I thought our readers and sportsmen might like a couple good tips.

Plastic laundry bleach jugs can be converted into numerous useful items. Cut one in half horizontally: the top becomes a funnel or a seal hailing megaphone. The bottom, with the addition of a mere handle become a pail or bait bucket. With the bottom removed and the side opposite, the handle cut on a taper, the jug becomes a boat bailer. The discarded bottom becomes a plate tied to a weight on a line. A jug becomes a buoy. Filled with cement, it's an anchor.

In rough water run a rope through ring bolts fastened around the boat's gunwale, should you capsize, the rope will be easy to grasp and hold onto.

Howard F. Sherlock, Latrobe.

NO LITTER, PLEASE

Gentlemen:

Conditions surrounding many of our lakes are not to my liking. Empty bottles, beer cans, paper and whatnot are very noticeable. The persons, if they can be deemed as such, should examine their conscience and also try to realize that others are trying to keep the fishing sites clean and sanitary. It should be discussed and something definite should be tried to offset conditions such as these. I often wonder, if the homes in which these trash hounds live are of the same surroundings and unhealthy conditions. If every keen minded fisherman who sees anything that is not to the ethics and code of the Commission while he is fishing a stream or lake, he should report this information to the authorities of that area. This in some small way might help lessen this filth strewn condition.

Leo N. Schoenig, Pittsburgh

Cooperation between sportsmen and officials can always mean better enforcement. Littering? See our answer to the "Jolted By Stream Note" letter on page two of this issue.

—Tom Eggler, Editor



"WELL YOU SAID I SHOULDN'T GO FISHING ALONE, DEAR!"



FISHING OUTLOOK

FEBRUARY, 1969

By-- Stan Paulakovich

THE MONTH OF FEBRUARY with its blustery winds, snow squalls and knee deep snow brings out each year more and more fishermen who are learning—and liking what they learn—about ice fishing. The finger numbing cold and the snow blowing in your face are soon forgotten when the red flag goes up on the tip-up and a fat, sassy pickerel is soon flapping on the ice.

My earliest recollection of winter fishing goes back several years when my buddy John and I told our wives we were going fishing in February. Their standard reply was "you must be some kind of nuts, fishing now." Their words were quickly forgotten when arriving at a local lake with a warm water discharge into it we met a wine-sipping baritone voiced angler who sang continuously, from operatic arias to bar room ditties. Asking about his luck he held up two tremendous crappie in the 18 inch class that easily would have covered a foot ruler in depth.

Scattered over Pennsylvania are many rivers and lakes with warm discharges from power plants that during February always produce excellent fishing. Fish seem to congregate in such areas in droves and can be readily taken by any of the standard fishing methods.

In the last several years ice fishing has grown tremendously in popularity. I remember back in 1964 one cold February morning temperatures stood at 18 degrees below zero. With Game Protector George Szilvasi we were picking up rabbits in Allegheny County for the Game Commission trapping program. Our route took us past North Park Lake and I had bet George a cup of coffee that nobody would be out in this weather. Arriving at the lake we found three fishermen bundled up like Eskimos and with a makeshift shelter and several nice trout frozen solid on the ice next to them.



"MAYBE YOU'LL OUTSMART THE FISH THIS TIME IF YOU DRINK WHAT THEY DRINK!"

The ice fishing fraternity differs in many ways from all others. When the action is slow, groups gather about a blazing fire and discuss baits, lures and methods and talk about the big one that wouldn't fit up through the hole. No matter what the conversation, however, one wary eye is watching for the tell tale dance of the red flag that signifies a fish is on.

Although pickerel and crappie are occasionally taken through the ice on small spinners, darts or spoons ice fishermen normally fish for them with minnows. Northern pike, walleye and bass likewise require minnows as bait. Trout taking methods vary over the state. Some waters do well with minnows or small red worms while others rely on salmon eggs or cheese balls. If you haven't used the phrase "What did you catch him on buddy" now is a good time to put it into practice. In open water trout areas small spinners seem to be most effective. And keep in mind that the winter season for trout closes midnight February 15.

Of all ice fishing areas in the state probably the best known and the most heavily fished is the Presque Isle, Misery Bay section of Lake Erie. Easy access is available at Presque Isle state park and with about four square miles of a 12 inch cover of ice to operate on you'll see practically every type of shelter known to man—from the elaborate shacks on runners with windows and floors to makeshift shelters of snow. Every possible bait, lure and method of ice fishing will probably also be seen.

The yellow perch is the prime target for ice fishermen here although smelt fishing is gaining in popularity while occasional northern pike, walleye and bass are taken. Depths in the bay go to 32 feet with the average being 20 feet. Veteran anglers here prefer short ice rods and jigs with mousie grubs, mealworms perch eye or some fluorescent type ice jigs. Small emerald shiners on tip-up rigs will keep you busy hopping from one to the other when the perch are cooperating—and there is nothing more mouth watering than a pan full of yellow perch fillets.

Bait shops in the area are open all year long and carry an ample supply of baits, lures and rigs. Hotel and motel accommodations likewise are plentiful in the Erie areas.

Waterways Patrolman Norm Ely, 2130 Eastern Avenue, Wesleyville—16150 (phone 814-899-9535) rates this area in February as good as, or better than, any area in the state.

See you on the Presque Isle ice!

GO COHO!



by
Tom
Eggler

FISHERMEN BEGAN DISCOVERING coho salmon fishing in Lake Erie during the fall months of 1968 as early run "jacks" started returning. Many anglers and sportsmen gave coho fishing a try but usually found they had plenty of room to use their elbow room. Many catches were made from shore as well as from boats.



TWITCHES OF EXCITMENT spread through northwestern Pennsylvania during the closing months of 1968 as sportsmen—and businessmen—began hearing reports of occasional coho salmon being caught along Keystone State shores of Lake Erie as "a few thousand jacks" found their way back to the streams they'd been reared and released in early last spring.

The coho—possibly Lake Erie's "instant success" fish—have until this fall to grow when the main run can be expected. The "jacks" returning last fall are all premature males returning to spawn one year earlier than the normal

Pictures and Story
Next 2 Pages!

HAPPY COHO FISHERMAN (above) holds up his first trophy. It was his first time out! It hit a small silver spoon. Below left, Pennsylvania Fish Commission employees Howard Wilson and Bill Hawley check one of the weirs located on streams into which the coho were running. Wilson is the captain of the Perca, the Commission's research vessel on the lake. Hawley is the fisheries biologist in charge of the Erie operations. Below right a trio of sportsmen inspect one of the salmon captured in the stream. From left to right they are Harry Flynn, active sportsman and frequent helper with the coho project, Wilson "Doc" Beil, who probably caught as many coho as anyone during the '68 run, and sportsman Bill Hill, Erie County Commissioner.





GO COHO-

three year life cycle of their kind. (The return of a small percentage of these males is not unusual, biologists say.)

The early run indicated they found plenty of food in the big lake and, barring unforeseen circumstances, could be expected to come back in numbers and sizes that may well draw fishermen by the thousands to the lake during the fall months of 1969.

Salmon caught in 1968 ranged in size from 16 to 20 inches and weighed up to five pounds. Eight months or so from now many may range in size from 30 to 40 inches and weigh 12 to 20 pounds. The fishermen who turned out last fall "to have a go at coho," as one angler put it, will probably find plenty of company during the closing months of 1969.

A similar program started by the Michigan Conservation Department has attracted fishermen by the thousands from all over the eastern and midwestern part of the country to the shores of Lake Michigan. Cohos stocked there in 1965 began returning as adults during the fall months of 1967.

Cottagers and motels were suddenly packed. Campgrounds overflowed. Tackle dealers soon sold out entire stocks. Boat dealers and marina operators couldn't get equipment fast enough to meet demands.

Over 80,000 coho smolts (about six inches) were released into Pennsylvania's Lake Erie tributaries in the spring of 1968. At that time they were about eighteen months old—half their three year life cycle. They'd been reared in temporary holding ponds constructed by the Commission's Engineering Division during the snowy fall of 1967 after being hatched and held at Commission hatcheries. "There wasn't any question about when they were ready to leave" says Shyrl Hood, head of the Fisheries Division's Warmwater section. "They were crowding the daylights out of the screens, and frequently tried to jump them," he says.

About 20,000 of the fish were also held in ponds of the Elk Creek Trout Club and the 3CU Club, which both rear fish (normally trout) as part of the Commission's Cooperative Nursery Program.

Homewaters of the coho are the Pacific coast where they run into the ocean. They're called "anadromous" because

continued on page 27

Want More Coho Information?

WRITE: *GO COHO*
Conservation/Education Division
Pennsylvania Fish Commission
Box 1673
Harrisburg, Pennsylvania 17120





NEAR THE MOUTH OF GODFREY RUN, one of the three principle streams where coho were released, Hill, Wilson, and sportsman Dave DeHaven stop for look at the lake. To the right Bob Parlaman, Game Commission information and education field representative; Jim Bashline, executive secretary of the Joint Air and Water Pollution Control and Conservation Committee, and Shyrl Hood, head of the Fish Commission's Warmwater fisheries, pause at one of the ponds rushed into use to hold the coho.



TIP-UPS WERE the order of the day for a winter fishing trip to Hunter's Lake in northern Pennsylvania.

BORED WITH WINTER?

THERE'S - - -

FAST FISHING AT HUNTER'S LAKE

by DON SHINER

AFTER POURING COFFEE into our cups and returning the blackened pot to the fire, I glaneed up in time to see the flag snap up on my distant tip-up. I had finished setting it and four others in holes only moments before and had just joined the group around the fire built with driftwood on shore. If this indieated the kind of aetion in store for us, we'd have a real sizzling day of fishing in this smallish lake loeated in the upper Appalaehians of northern Pennsylvania.

I hurriedly set the cup in the snow and ran. I lost no time getting onto the iee.

Line still played out from the reel as I earefully lifted the tip-up from the hole. I eould feel the throbbing of the fish. My heart pounded. I lost all eonsciousness of the near-zero temperature of the air and the stiff northerner that blew aeross the pond.

I figured that fish had plenty of time to get the bait into its mouth. I gave the line a sharp yank and fetehed it in hand over hand, dropping loose eoils around my feet. There's no way of knowing what kind of fish it is. I pietured a trout, in my mind's eye, but it eould be a piekerel, or perch or possibly a hand-size bluegill. I'd know soon.

I pulled in a few more feet of line and then brought the fish through the hole. A fat ehain pickerel began flopping wildly about on the iee.

I turned toward two buddies who had followed me onto the iee. They were gone. Both off aeross the iee toward flag waving tip-ups of their own. A sharp blast of wind swirled powdery snow around my face temporarily obscuring them from view. I got on with the job of rebaiting my line and returning the tip-up to the ice hole. I let the piekerel lay on the iee, knowing that within a few minutes the eold air would freeze it as hard as driftwood.

I trotted toward my nearest buddy who was kneeling down beside one of his iee-holes. A ten-ineh perch lay on the iee beside his knee. I learned later that my other buddy missed seoring, with only a bare hook to show for his efforts. We returned to the fire side and sipped our hot eoffee.

We were fishing this day in little known Hunter's Lake, a smallish pond loeated near Eagles Mere, in northeentral Pennsylvania. We'd heard reports that trout, stocked before freeze-up, were biting. The new ice had been safe for barely a week when four of us decided to go. Three were old hands at this winter fishing game, but it was Steve's first go at it. He'd seemed a bit reluetant to come along. We told him he had a ehoiee—keep his taekle bundled up until spring, or give ice fishing a try. He had grown tired of loafing indoors and the boredom that follows, so he deeided at the last minute to eome along.

We rounded up extra tip-ups and a spare jig-rod for him to use. He could use our ice-picks to chip his holes.

Our snow tires had hummed as we drove over long stretches of bare highway, but quieted to a whisper when we turned off the main thoroughfare and onto the snow clad secondary road that led to Hunter's Lake. Numerous tire tracks in the snow indicated that other fishermen were already there. This assumption proved correct. We barely found room to park in the small clearing near the old breast of the dam. Fishermen were sprinkled everywhere on the ice. It looked like a winter carnival.

We set up shop on the ice near the far shore, some distance from the dam breast work and scattered in a semicircle, each selecting sites to chip holes for our tip-ups. I showed Steve how to cut holes in the 8-inch thick ice and bevel all edges to minimize fraying lines. We measured depth of water below each hole by dropping a weighted line to the bottom. Lines of slightly shorter lengths were pulled from each tip-up reel. We baited hooks and dropped them into the holes. Luckily, I had stored a sizeable bucket of worms since last fall for this occasion. But if the fish wanted no part of this bait, we also had hardware-type lures—Swedish Pimple and Twistin' Minnie spoons—for jigging.

I helped Steve set out his tip-ups. Finally, with all of them set into place, we walked to shore where our friends already had a roaring fire going. Coffee, pre-cooked at home, was perking in a pot. They handed cups to us as we sat down on our boxes of spare fishing gear. I had just poured coffee when the chance look showed the flag flying on the tip-up. It signalled action, the first of many runs onto the ice. Indeed, action remained so brisk during most of the day that it would have been far less troublesome to stay on the ice than to return continually to the warm fire. We caught chain-pickerel and perch, and lost several fish, one of which appeared to be a smallmouth bass but caught no trout.

This turn of events proved puzzling. Bass are supposed to be in some phase of hibernation at this time of year. And other fishermen nearby caught numerous brook and rainbow trout, among other fish, in the 10 to 14-inches class. Perhaps they fished deeper water. With this in mind, I chipped more holes toward the center of the pond and rigged up a "pimple pole," a commercially made jig-rod, in preparation to jig small spoon-lures. After chipping the holes, I moved from one to another, pausing long enough to jig the little spoon temptingly in the dark water. A pickerel, of smallish size, and several nice perch tried to swallowed the silver-colored lure.

Steve's reaction to his first go at winter fishing proved rewarding to all in our party. Inside of a half-hour, he operated like a veteran and took to the ice like a hound set in the midst of freshly stewed beef bones! His catch matched ours.

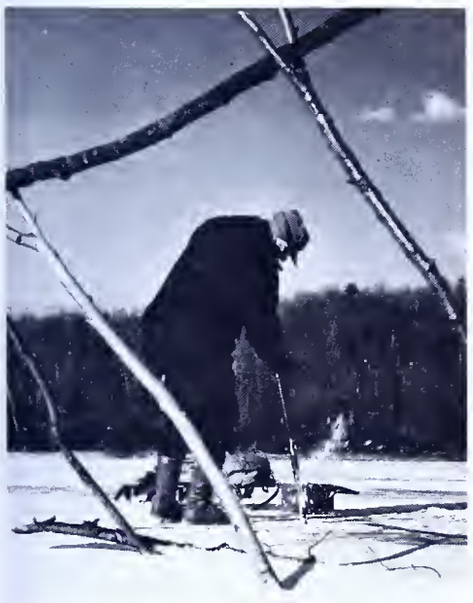
Everyone, almost to the last man on the lake, caught fish this day. I explained to Steve that action in winter isn't always that brisk. There are times when fish refuse all baits but I doubt if he believed me. They bit so well that day it was difficult to imagine a time when they wouldn't.

We cooked and ate our lunch by the fire. Several nearby fishermen caught more trout about noon. Later we learned that they used minnows and larval grubs found in golden rod stems to catch them—baits we hadn't included that day.

Forty or fifty-fishermen were on the ice throughout the day. In fact, there seemed to be a continuous procession of exchange going on, with some leaving, and others arriving to take over the vacant ice holes.

Toward mid afternoon, action slowed to a halt. We had plenty of fish so decided to fold gear and go home. Just as Steve was hesitant to come along this day, now he was every bit as reluctant to leave. He expressed regret at not getting involved years ago in this winter sport.

The pictures on these pages are of our outing—they show that ice-fishing is a winter activity that beats loafing around the house weekends. Be sure to try it this year before it's too late!



HOLES WERE chopped through the ice with a spud near the shoreline on the far side of the lake.



PLENTY OF good size perch fell to the angler's tip-ups.



FISHERMEN turned out in good numbers for a go at ice fishing throughout the winter.

THE QUILL BACK CRICKET



Crickets are major terrestrial insects, attract big trout.

fly tying feature

by

CHAUNCY K. LIVELY

THERE IS SOMETHING ABOUT hopping insects that seems to fascinate trout and makes them throw off their usual instincts of caution. Like grasshoppers, crickets offer a meaty mouthful to a waiting fish and with their highly developed hind legs, (the kicker legs) crickets make a commotion on the water that unmistakably announces their presence.

No part of the cricket's life cycle is aquatic; yet, grassy banks along streams often abound in cricket life and enough of these cheerful little insects get into the water to attract the attention of the trout. The common field cricket is especially plentiful along the limestone meadow streams and it is this type that the Quill-Back Cricket imitates.

The approach to a dry fly imitation of the cricket is far different from that of the ephemerids, for unlike the mayflies the cricket is a low-floater, riding flush in the water's surface film. This attitude negates the use of hackle and flotation of the fly must instead be achieved by a buoyant body material. The use of hollow deer hair, tied longitudinally on the hook and tightly segmented with thread to trap air pockets, serves perfectly.

Some years ago I tied and used a cricket made almost entirely of deer body hair and a highly successful pattern it was. But trout have sharp teeth and the all-hair cricket often became chewed up much sooner than the painstaking tying effort warranted. The tie was modified several times before we hit upon the idea of using a section of vinyl-coated goose quill over the back of the fly to protect the deer hair. The tough vinyl coating not only prevents breaking up of the delicate material but it helps to maintain the body shape. The Quill-Back Cricket shown on these pages is not only durable and a good floater but it attracts big trout.

The Fish-For-Fun Paradise water on Spring Creek is an ideal testing ground for terrestrial patterns and it was here that the Q-B Cricket had an impressive initiation on a June afternoon three years ago. It was a hot day and my wife and I had hiked to the shaded upper end of the project water to get out of the sun. On the opposite side of a long pool there was a heavy rise in a little slack-water bay, snug against the road embankment. The trout was in a difficult spot to reach. The back cast had to be thrown through a narrow opening in the trees and the forward cast sent high and stopped over the mark, creating enough leader slack to allow the fly to float for a few seconds before drag took over.

My first two casts were short of the mark, I suppose mainly because I was a little timid about hanging up in the

continued on page 26



STEP ONE



STEP TWO



STEP THREE



STEP FOUR



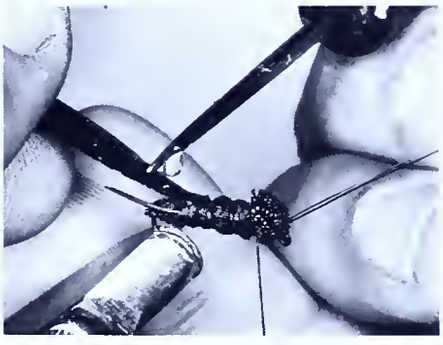
STEP FIVE



STEP SIX



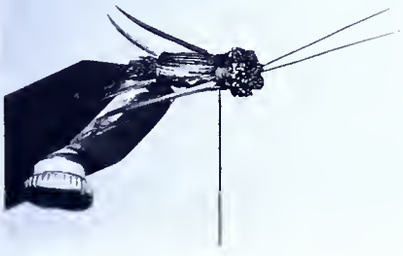
STEP SEVEN



STEP EIGHT



STEP NINE



STEP TEN



STEP ELEVEN



STEP TWELVE

1.—Place a size #14 long shank hook in vise and tie in size A black Nymo thread at bend. Allow about a four inch end of thread to hang free as shown and spiral spool end of thread forward to eye. Cut off thread hanging at bend and lay aside for later use.

2.—For antennae select two straight black bear hairs and tie in just behind eye. Half-hitch. Antennae should be about twice the length of hook shank.

3.—Cut a medium-thick bunch of deer body hair (dyed black) from the hide and hold in left hand with butts extending over eye. Take a loose turn of thread around hair and lower hair to hook. Take up slack in thread, bring thread under hook and over hair and gradually pull thread tight, causing hair butts to flare. Half-hitch. (Initial loop of thread around hair keeps hair on top of hook.)

4.—Maintaining position of hair with left hand, spiral thread tightly around hair and work toward bend of hook. Spirals should be spaced about ⅛" apart.

5.—Half-hitch thread at bend of hook. Body should have three or four segments with hair flaring both front and back.

6.—Carefully trim hair in front to a ball-shaped head. Avoid cutting antennae. Holding thread out of the way, trim hair in back to a point. Trimming may be easier if hook is removed from vise.

7.—For tails select two dark condor quill fibres and tie in against sides of body at rear winding. Fold back butt of each quill fibre and take two turns of thread over fold, locking tails in place. Trim away excess butts as shown.

8.—For quill back cut a section of dyed black goose primary, about 3/16" wide. Tie thin end flat over tail windings with shiny side down so that butt end of quill section extends back over rear of hook. Spiral thread forward and half-hitch behind head. With bodkin point, spread a drop of thin vinyl cement on top of quill section. While still tacky, fold quill forward and press against back. Tie off behind head with two turns.

9.—Trim away excess quill section snug against windings.

10.—Tie in two condor quill fibres to represent kicker legs at sides of body behind head. Tips should extend back almost to tips of tails. Fold back butts of condor quill and wind over fold as in Step 7. Trim away excess. (Note: If condor quill is not available the tails and kicker legs may be made of black goose quill fibres, taken from the short side of the primary.)

11.—Invert fly in vise. Take piece of thread laid aside in Step 1, and cut it in two. Bind the two pieces of thread to body to form an "X" pattern. These will represent the primary legs. Move thread forward to eye of hook, whip finish and cut thread.

12.—Remove fly from vise and trim thread legs to length shown. Coat quill back with vinyl cement and apply a drop to ends of thread legs to prevent fraying. Put a drop of lacquer on whip finish and on exposed tail and leg windings. Quill-Back Cricket is now completed.



THAT OLD SAYING "the early bird gets the worm" often holds true for ice fishermen, although not always. In the pictures above a pair of anglers head across the ice with their gear loaded on a sled. They then unpack and begin setting up their shelter which can be formed from the unit.

The months between the Christmas holidays and the opening of trout season in April used to be the longest period of the year for me. There was little in the way of fishing to be found in the section of Pennsylvania where I live—until I discovered the thrills of ice fishing!

Like a lot of other sports one's first experience will have a lasting effect upon his future attitude. If, on that first excursion, an angler should have a good trip he will undoubtedly become a permanent convert, but if he has a bad trip chances are he might never give it a second try. In case you are one of those people who are seriously considering giving ice fishing a try for the first time you should know all you can about this sport before you head for the ice that blankets your favorite lake.

Ice fishing is without question a cold sport but there are days when it is even too cold for ice fishing! When the temperature hovers close to zero and the wintery winds blow unmercifully can be poor days for ice fishing, especially for beginners. However, when the temperature rises into the upper teens and on into the twenties spending a day on the ice is fun—providing the proper clothing is worn.

In recent years the perfection of insulated clothing has probably done more for the advancement of ice fishing than has any other single thing. Wear a suit of insulated underwear under the heavy pants and coat you wear deer hunting. Along with this a good pair of insulated boots worn over a pair of wool socks and a hooded parka should offer plenty of protection. Gloves should not be forgotten but it is diffieult to fish with them on so they can only be worn part of the time.

When selecting insulated clothing for cold weather wear, it pays to buy brand names for there is no other item a sportsman ean be taken on so badly. Much of the insulated clothing that sells for bargain prices is practically worthless at low temperatures—when it is really needed. No matter how well the fish are biting nothing can ruin an ice fishing trip so quickly as getting unbearably cold.

Either an iee auger or a spud bar can be used for cutting the holes through the ice. Having used both I prefer the auger for it is faster, requires less effort to run, and is quieter than the spud bar. An auger is just an extra large brace and bit which was designed to drill holes through ice. These come in an assortment of sizes but one that euts a hole six inches in diameter is sufficiently large for pan fish. A good one will cost somewhere between $8 and $10.

Once the holes are drilled a lot of slush comes to the surface. To prevent the holes from freezing shut quickly the slush should be skimmed off the surface of the water. On mild days the holes will rarely need to be freed of ice but when it is cold and the wind blowing or it is snowing hard slush ice will continually form. To detect soft biting fish the holes should be kept clear of ice at all times.

Most ice skimmers consist of a dish shaped piece of metal which has a long handle attached. These are quite inexpensive. A simple but effective one can be made from a quart sized plastic milk bottle. Cut one side and the bottom away with a sharp knife so the remaining part is the shape of a scoop. To complete the job punch a number of holes in the bottom so the water can drain after the slush has been scooped.

Most equipment needed for ice fishing is quite simple. Anglers after pan fish often use an ice rod which is inexpensive to purchase or can easily be made at home. The one I prefer merely consists of two pieces of wood nailed togcther and a fiberglass tip or shaft inserted in one end.

Two short dowels are placed on the handles to wrap the monofilament around. Use either 8 or 10 pound test. It's easier to see and handle than lighter line.

A popular bait for pan fishing is small live minnows or larva such as mousies and wigglers. The last two are gathered by bait dealers in the fall and offered for sale throughout the winter. Both larva come in small plastic boxes filled with moist sawdust and contain close to 50 baits. A box of these can be kept all winter by storing them in a refrigerator when not fishing.

Hooks for ice fishing should be kept small, usually No. 10's or 12's. Many ice anglers prefer gold hooks for they feel they are morc easily seen under water and act as attractors. Ice jigs are also popular especially when using





TIPS FOR
THE BEGINNER

by
ED ATTS

ICE FISHING PRIMER

mousies or wigglers. These are merely long shanked hooks that have a brightly colored piece of metal attached behind the eye. By placing one or two larva on the hook and jigging it up and down frequently they attract fish from considerable distances. These are noted as being especially good for perch and bluegills.

Most panfish feed a few inches off bottom so it's important to have the bait at the proper depth. Carry a spool of bait casting line with a heavy sinker attached to one end to measure the depth of the water.

Drop the sinker through the hole and let the line run between the thumb and forefinger until the weight hits

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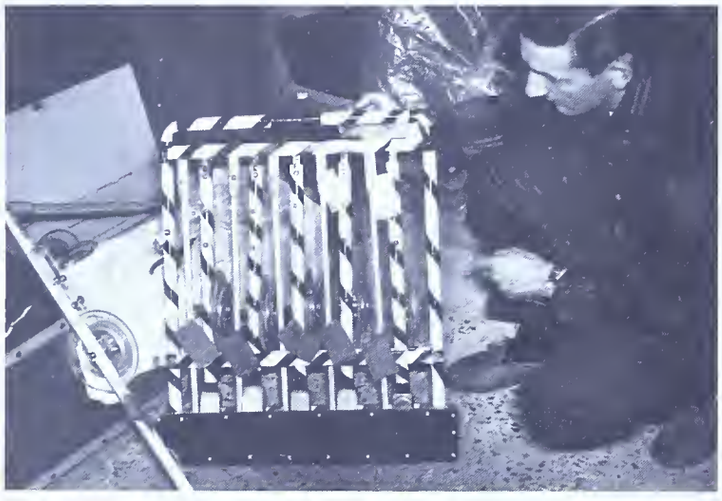
AT THE TOP OF THE page ice fishermen bait up while a fellow fisherman cuts another hole through the ice. In the upper right corner an angler jigs for perch. Directly above ice fishermen equipped with ice skates for fast easy travel to their tip-ups, wait for that signal flag to go up. To the right angler Bill Ray holds a perch, one of many he's caught on Lake Erie's Misery Bay.



LEE SMITH + TEN DOLLARS + EFFORT =

Ice Fishing DELUXE

by Bill Porter



LEE SMITH, Chambersburg angler, might be eonsidered the "Dean" of ice fishermen in southcentral Pennsylvania if for no other reason than his equipment, a fancy set of tip-ups and an inlaid sled to earry them. "Smitty" ereates an aura of expense and skill when he steps out on the icc, but he fractures the first part of the illusion when he gives a big grin and answers the inevitable question, "How mueh did they cost? About a buek and a half apiece and I've got two dollars in the sled."

The seeret, of eourse, in the priee is that he makes all his gear in a basement shop from bits of material serounged here and there. Broom handles, bits of cast off piano wire, a scrap of red flannel from a lamp base, and pretty soon there is an aceumulation that results in another set of tip-ups, another sled, or some other pieee of attractive and useful outdoor equipment.

But getting back to the "skill" part of "Smitty's" winter fishing before going into the details of his rigs, Lee is an avid ice fisherman with a prefercnee for the Letterkenny Dam in Franklin County. He says its high-walled, narrow valley holds the iee longer than other loeal areas and the trout are there in quantity and good size. Shawnee is his seeond choiee, primarily for the variety of species the lake offers. For a change of seene he fans out to Opossum Lake, Fannetsburg, Cowan's Gap, Meadow Grounds and any other place where there's enough iee to hold him.

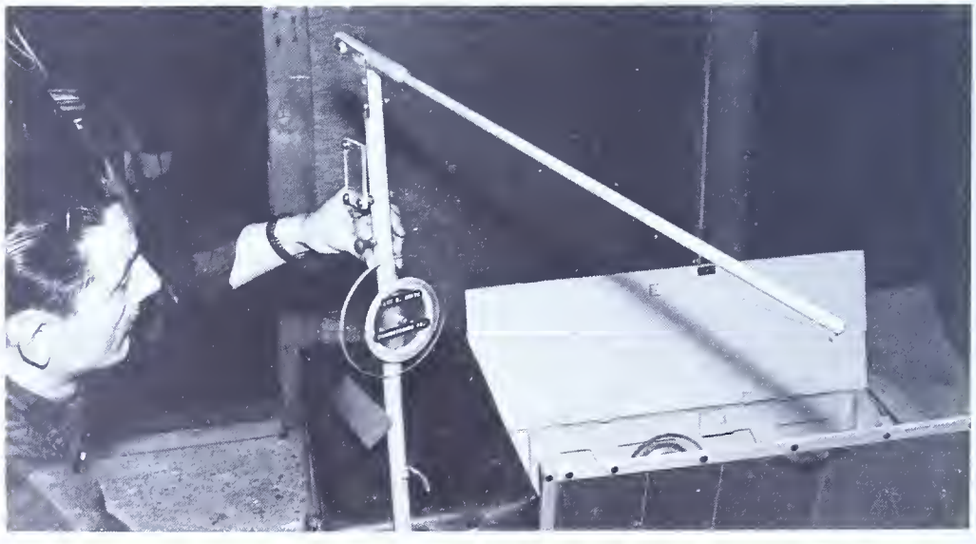
Minnows in the three to four ineh range are THE bait and he maintains a steady supply in a special aereated tank in his garage year round. Oeeasionally, a night crawler or two will be used. The popularity of these baits last year resulted in an 18 inch brown from Letterkenny, a half dozen rainbows in the 17 inch class, and many smaller trout. There were also northerns from Shawnee, and he and his eompanion, Rowan Smith, pooled their talents on a 36 inch muskie from the same lake.

But baek to the basement workshop to examine the tip-ups in some detail. A broom handle provides the main shaft for the tip-ups; hinged at the top with a ½ inch hardwood dial on a swinging arm that permits the line to angle down from the trigger to the water. The base of the broom handle is set in a bloek of wood which in turn is construeted to hold its position on the iee. This basic unit folds neatly into a nest on top of the sled.

Perhaps the outstanding feature of Lee's rig is the reel whieh is made from plexiglass. After some experimenting, this material was found to be the best for several reasons. It was easy to form; the line supply was always visible; water did not freeze to the surfaee of the reel; and it could be handled in very eold weather without losing skin from the fingers. Finally, line did not freeze to the reel's surfaee. So mueh for the choiee of materials, Lee's design is equally important.

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ICE FISHERMAN prepares to remove hook from trout caught during a Pennsylvania Fish Commission Ice Fishing Clinic last winter.

LOOKING FOR SOMETHING INTERESTING TO DO THIS WINTER? PLAN A VISIT TO A PENNSYLVANIA FISH COMMISSION . . .

by Tom Eggler

COOL SCHOOL

NEXT TWO PAGES

WATERWAYS PATROLMEN Anthony Murawski, Paul Swanson and Richard Owens (above) explain ice fishing equipment to a group of new ice fishermen during a clinic held last winter. As Swanson continues the demonstration, (below) a young angler sits out the session in a comfortable stroller while Mom keeps an eye on things. Note that handy tackle box slung carefully under the seat!



COOL SCHOOL-

A FROZEN LAKE MIGHT not look r
school but if you're an ice fisherman—or
ably learn plenty on a nearby lake this w
rooms in the Keystone State—one of th
ice fishing clinics.

Patterned to help teach old anglers n
"schools" are held throughout the state
permit.

You'll learn what equipment is used
do it. If you don't already know the dif
suddenly discover they're not the sam
swers to many basic ice fishing questio
was where to "look" for the fish.

Conducted by the Commission's Wa
demonstrations by sportsmen who are r
First time ice fishermen usually find th
many end the day with piscatorial pro

Interested in attending? Contact you
tion about when and where an Ice Fis

A TIP-UP IS effective and easy to use, if you understand it. Below Swanson explains how they work while to the right a group gathers around an angler who proved that ice fishing can be fruitful.







MOMENTS OF THE OUTDOORS are shared by ice fishermen, above, as they wait for the flags to fly on their tip-ups while below Dad, Mom, and children enjoy a crisp winter afternoon on the ice. Right—the girls get in on the act!









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becoming one—you can prob-
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rough the ice as well as how to
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FISHING IN PENNSYLVANIA

CONTINUED FROM LAST MONTH

PART TWO

by JIM VALENTINE

Art by CHUCK RIPPER

THINKING LIKE A FISH

At this point, in many publications, a great deal of emphasis is placed on what is called "proper casting techniques." Included are illustrations, as well as verbal instructions, advising the reader as to the proper way to grip a fishing rod, the correct arm movements, accepted foot positions, etc. No attempt is made to minimize the importance of good casting techniques. Doing things the accepted way might make you an expert caster—but some of the best casters may be really poor fishermen! It is much more important, especially to the new fisherman, to learn about fish and their habits. There will be more time later to develop a perfect casting style if this is your desire. *TO CONSISTENTLY CATCH FISH, YOU MUST LEARN TO "THINK LIKE A FISH."*

Talk to any good fisherman and before long, you will learn that he has a fairly good understanding of nature in general—he is an outdoorsman! By this, we mean he understands woodland animals, fish, trees, flowers, and all the other things that comprise the multitude of living things found outdoors.

Fish are perhaps as simple as any animal to learn about and understand. They seek three main things during their lifetime—a supply of food, cover in which to hide, and a chance to reproduce. Learn the food preferences of a particular fish, the type of cover he prefers, his spawning habits, and you are on your way to becoming equal to the task of catching him. Let's look at each point more closely and see how it may help us to catch fish.



FOOD

This is obviously the most elementary to understand. A fish, like any other living creature, needs a supply of food to sustain life. What type of food, and *where* he obtains it is what is really important to the fisherman. As an example, largemouth bass may seek the deep cool water during the hot days of July and August, but they return to the shallow edges of the lakes and ponds at night to search for food. The shoreline is full of crabs, frogs, small pan fish and other types of food that make up the diet of the largemouth. By knowing *what* type of food he prefers, and *where* and when he feeds, we can plan to be where he is at the proper time to catch him.

COVER

Fish choose certain types of cover for two main reasons. First, it will provide him with protection from his enemies. Secondly, it will put him in the best possible position from which to catch an unsuspecting meal that is drifting or swimming by. Large brown trout feed a great deal during the night hours and rest in and around some sort of cover during the day. To know that these large trout may be found hiding in undercut banks or around submerged logs and rocks will place the fisherman at a great advantage.

SPAWNING

Although many species are protected during their actual spawning periods, the weeks immediately before and after spawning are often the most productive time to fish for these species. Walleye, for example, spawn very early in the spring, and often late winter fishing, prior to their spawning, and a few weeks immediately following spawning, will produce more walleye than any other time of the year.

As you can see in the examples you have just read, learning to "think like a fish" is extremely important to catching fish. Learning the habits of fish is something that cannot be done without putting forth some effort. The process can be slow, and sometimes distressing, (especally when you continually come home with an empty creel), but there are short cuts you can take to learn more about fish and fishing.

Experience is said to be the "best teacher." This may be true, but learning by experience is usually a tedious process. Why wait to learn from experience when you can learn from the experiences of others. Books by the thousands are available that cover all phases of fishing. Most of these books are excellent, and you can learn something from all of them.

Another way to learn about fish and fishing more quickly is from other fishermen. Watch a good fisherman at work. Watch *what* he does and *how* he does it. Ask him some questions and you'll find that most good fishermen are more than eager to help a new fisherman get started.

CATCHING FISH

So far we have discussed the various types of fishing rods, reels, and lines. Suggestions have been made regarding suitable equipment for the new fisherman. We have mentioned how important it is to learn the habits and food preferences of individual species of fish. Now it is time to explore a little deeper some of the individual species found in the waters of Pennsylvania. We will discuss the food preferences of each fish, the types of equipment used in fishing for them, where they can be found, and perhaps pass along some tips on how to improve your chance of catching some of them.

PAN FISH

Fishermen have grouped our fresh water fish into two broad categories—game fish and pan fish. The game fish group includes bass, trout, walleye, northern pike, muskellunge, and a few others. Pan fish are such species as sunfish, bluegills, rock bass, crappies, perch, etc. Just how pan fish acquired their name has not been established, but it probably has something to do with the frying pan and the fact that many of these are excellent fish to eat.

The first fish that most young boys and girls catch are usually some species of pan fish. This is true because they are generally more abundant and therefore a great deal easier to catch than game fish. Don't ever look down your nose at pan fish, however, for they can provide some very exciting hours of sport fishing.

It is fallacy to assume that just anyone can catch all the pan fish they want. There are tricks to all types of fishing that enable some fishermen to consistently catch more fish than others. This holds true with pan fish as well as game fish.

BLUEGILLS—SUNFISH

Bluegills and sunfish are two of the most common fish found in our waters. They are abundant for several reasons. They are extremely prolific, meaning they reproduce quite readily under a variety of conditions, and will spawn more than once a year. They are abundant because nature intended them to be the source of food for many of our larger game fish that have immense appetites. Perhaps another reason for their large numbers is that they are greatly under-harvested since many fishermen do not seek these fish with as mueh enthusiasm as some of our larger game fish.

BLUEGILL

Bluegills and sunfish can be found in most of our warm water lakes and ponds. They are generally found close to the shoreline for this is where the weed growth is the heaviest and the food they eat is most abundant in these weedy areas. The weeds also provide cover which acts as proteetion from the larger predatory fish intent on eating them.

If you are after sunfish and bluegills, fish near the weeds. Almost anytime of the day will find these little fellows actively feeding. They never seem to get enough to eat. Their choice of natural food is small aquatic organisms, bugs, nymphs, flies, small crustations, and almost any other edible thing small enough for them to swallow.

During the months of May and June the larger bluegills

continued on next page



FISHING IN PENNSYLVANIA

continued from previous page

and sunfish are particularly active and easy to catch since they are at the peak of their spawning activity. They are busy guarding their nests and are quite willing to strike at anything that suggests a threat to the eggs. Use a bobber to keep your bait out of the weeds, bait your small hook (size 8 or 10) with a worm or any of the other natural type baits, and you're sure to catch bluegills and sunfish. This is also an excellent place to try out the new fly rod you recently purchased. You can use a variety of dry flies, wet flies, small poppers, and other fly rod type bugs. These will take bluegills, and at the same time you can gain valuable fly casting experience. With the fast action these fish usually provide, you can quickly develop into a pretty fair fly fisherman and be ready to try out your fly rod on the more elusive trout.

ROCK BASS

The rock bass is a river and stream fish found in most of the rivers and larger warm water streams throughout the Commonwealth. This fish is slowly winning a warm spot in the hearts of many Pennsylvania anglers. He inhabits the same type water and cover as the smallmouth bass and is an extremely sporty fish and excellent eating.

In the spring of the year, from the middle of May until about the first week in June, rock bass are actively spawning and guarding their nests. This is the time of year when rock bass fishing is at its best. A light spinning rod or fly rod, a container full of night crawlers, and you're ready for some really fast fishing action. You can expect many of the rock bass you catch to be in the eight to ten inch class.

Where to find the rock bass at this time of the year is the least of your worries since they seem to be almost everywhere. The Juniata River and the Raystown Branch in southcentral Pennsylvania, the North Branch of the Susquehanna River in northeastern Pennsylvania as well as the Susquehanna River south of Sunbury are the more popular rock bass fishing areas. Time of day seems to make little difference since these fish are active from daylight until dark.

Most successful rock bass fishermen will wade the river using hip boots or waist high waders. A size six hook seems to be a good choice, and the bait used covers a wide variety. Night crawlers, small minnows, crabs, and hellgrammites will all work wonders on rock bass. Artificial lures such as small silver or gold colored spoons and spinners are excellent. The newer rubber imitation crabs and hellgrammites have proved to be an outstanding lure.

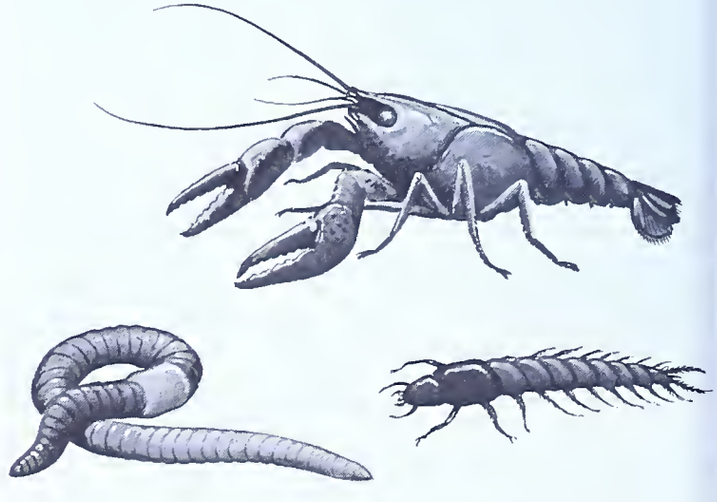
One tip to the new fisherman when trying for rock bass is to fish your bait deep, near the bottom of the river or stream. It may sometimes pay to use a bobber but generally this fish is a bottom feeder.

Rock bass are so named for their preference for hanging near rock piles and ledges. Find an area such as this and the fish are sure to be nearby. We strongly recommend that you try this sport, particularly during the time of year previously mentioned. Take home a stringer of these fish, fillet, and deep fry them. You'll be a confirmed rock bass fisherman for the rest of your life!

CRAPPIES

Crappies or calico bass, if you prefer, are found in many impoundments within the Commonwealth. Both the black and the white crappie are quite common, and since the feeding habits, choice of food, and spawning requirements are the same, we will combine the two and refer to them as the crappie hereafter.

Early in the spring, usually immediately after "ice out" on many of the lakes and ponds, a flurry of crappie fishing activity will develop.



CRAPPIE

They're a school fish by nature so usually where you find one you'll find hundreds. They are eager to accept a variety of baits and artificial lures, and in some areas, are literally harvested by the thousands.

Crappies choose to congregate around and near brush piles, sunken tree limbs, docks, and various other forms of cover. They feed at a medium depth which is most important to remember since this can be the key to either catching or not catching crappies. The use of a bobber or float when using live bait is a must. Start by fishing your live bait twelve inches below the surface. If this does not produce fish, lower your bait another foot below your bobber. You may have to fish even deeper since crappies feed at different levels. Experiment until you find at what depth the fish are located. The general rule is to fish about three feet below the surface during the day, and possibly as shallow as six to twelve inches below the surface late in the evening since crappies feed nearer the surface at this time.

Small minnows an inch or two long are ideal bait for crappies. They will, however, hit a variety of other baits. Small chunks of meat cut from the side of crappies already caught do an excellent job. Small spoons and spinners, small lead-headed jugs, darts and various streamers and wet flies are exceptionally good.

Pymatuning Lake, Conneaut Lake, Raystown Dam and Lake Wallenpaupack, are but a few of the outstanding crappie fishing areas in Pennsylvania. You can be sure there is a real crappie hot spot near your home.

NOTE: *THE BEST SOURCE OF INFORMATION ABOUT FISHING IN YOUR AREA IS THE WATERWAYS PATROLMAN. CONTACT HIM FOR THE LATEST LOCAL FISHING CONDITIONS.* Waterways patrolmen are men who have devoted their lives to promoting the sport of fishing and boating within our state. They spend a great deal of their time along the streams, rivers, and lakes. They know exactly what, where, and when the various species are being caught. They are more than willing to help you to get in on the action. Remember, this is a valuable source of information. Use it!

TROUT

Pennsylvania is blessed with hundreds of miles of trout streams and vast acres of deep water trout lakes. The propagation facilities of the Pennsylvania Fish Commission provides thousands and thousands of trout to be stocked in these waters each year. This stocking, combined with the natural reproduction that occurs in many streams, adds up to a fantastic number of these scrappy game fish available for the fishermen to harvest.

There are three main species of trout found in Pennsylvania waters—*brook*, *brown*, and *rainbow*. Generally, the brook trout is found in the cold, smaller headwater streams; the brown trout, in the larger streams; and rainbow trout in lakes and other impoundments. Many waters will contain all three species.

The opening day of trout season occurs around the middle of April. Early spring weather and water conditions can have a tremendous effect on how you will fish for trout this time of year. Late season fishing requires different techniques to be consistently successful.

Early in the spring the water is likely to be high, cloudy, and fairly low in temperature. Trout are usually a bit sluggish and tend to lie in the deeper pools feeding near the bottom. It is most important, when these conditions exist, to add weight to your line to get your bait or lure down to where the fish are feeding. The general rule is to fish slow and deep.

Early fishing can be productive if you use many of the natural trout baits. Small minnows, worms, night crawlers, and salmon eggs will all work well as long as you fish the bait near the bottom. Fly fishermen consistently take trout in the early spring on weighted artificial nymphs.

As the water clears and warms, trout become more active. Artificial lures such as small spoons and spinners can be quite effective at this time. Fly fishing begins to pick up as some of the early hatches begin to emerge. This is the time of year trout fishing is at its best! *Early morning and late evening are generally the best times to be on your favorite fishing waters.* Remember this rule!

Many excellent catches of rainbow trout come out of dams and lakes where the fisherman has been on the water at the crack of dawn. He has used a small gold or silver spoon on the end of his spinning line and worked the shoreline, casting out into the deep water and retrieving his lure slowly. Late evening fishing on a good brown trout stream can produce some outstanding catches. If you want a real trophy brown trout, try fishing after dark with a large night crawler or softshelled crab for bait.

Late season fishing for trout demands some special skills. The water is usually low and crystal clear. Trout are spooky at this time and will often shy away from many of the larger live baits and lures. The general rule is to fish with smaller terminal equipment and take care not to scare feeding fish with noisy wading or sloppy casting. A good dry fly fisherman with the right fly pattern can catch a lot of trout at this time of the year.

The choice of equipment for trout fishing is wide and varied. For live bait and artificial lures we would recommend the spinning or spin-casting outfits. A four or six pound test line is usually sufficient. A fly rod is a must for effectively fishing dry flies, wet flies, and nymphs.

Boots or waders are helpful when fishing the larger streams but are not an absolute necessity. The amount of equipment available for trout fishermen seems unlimited. Remember our earlier statement recommended that a few selected pieces of equipment, *properly used*, is all that is necessary to become a successful fisherman.

If you plan to take up fly fishing, you may find you'll want some special equipment. We would suggest you start by buying the basic materials needed to tie your own flies. This is not only economical but adds a great deal of interest to the sport. You will learn by reading, from other fishermen, and by experience, what types of flies will catch trout in your particular area.

For serious dry fly fishing you will want to use a tapered

continued on next page

FISHING IN PENNSYLVANIA

continued from previous page

line on your fly rod. Finely tapered leaders are also a must.

There is no question that aquatic insects are the primary diet of trout. These are eaten in great quantities in their various stages starting with the nymphal stage and continuing until adulthood when emergence occurs. Learn what species of aquatic insects are found in a particular stream, tie a close imitation, fish it properly, and you can be a successful fly fisherman.

BASS

Black bass, as they are commonly called both largemouth and smallmouth are found in most of the warm water lakes, ponds, dams, streams, and rivers in the Commonwealth. Largemouth bass are primarily an impoundment fish, meaning they prefer slow or sluggish water found in lakes and dams. Smallmouth bass, on the other hand, are found in the larger warm water streams and rivers.

Largemouth bass, as a rule, grow a little larger than the smallmouth. Many fish in the Pennsylvania Angler Citation award class are caught every year in Pennsylvania. Some outstanding fish will weigh as much as six pounds.

LARGEMOUTH BASS

Immediately after spawning, near the early part of the bass season, the largemouth is extremely active. The water has not warmed as yet to the point he is uncomfortable, so he can be found in relatively shallow water. This is one of the best times of the year to fish for the largemouth. Later on in the summer, this fish will spend the daylight hours off shore in the deeper cool water and return to the shoreline only at night to feed. At this time of the year, night fishing is a must if you want to catch the largemouth. Remember—*to consistently catch fish, you must plan to be on the water when the fish are active and feeding—not when it is convenient for you to go fishing.* This applies to all fish! We said previously there is a great difference between fishing and *catching* fish. You may enjoy sitting in a boat, soaking up the sun on a hot summer afternoon while fishing for bass. You will find, however, that you are just fishing—not catching! To catch the largemouth, you would do better to stay off the lake until midnight, for this is when the fish will feed.

Night fishing for largemouth bass with a surface plug will provide all the thrills a fisherman can stand. Dark nights, without moonlight, are generally considered the best.

Late spring and early summer, is an excellent time then, to fish for largemouth. They will hit a variety of underwater lures and bass plugs. One of the best lures is the black rubber or plastic night crawler. Rig the artificial night crawler to the end of your monofilament line and add several small split shot. Cast the line and allow it to sink; then retrieve it slowly toward you so it bumps along the bottom. This is one of the best methods for catching largemouth. Live bait fishing can be productive. A large chub or golden shiner, four or five inches in length, is an excellent bait for the largemouth.

Late autumn fishing for bass can really put fish on the stringer. The months of October and early November will find the largemouth actively feeding to fatten up for the long winter ahead. At this time of the year, surface plug fishing over a weed bed will produce fish. Generally, early morning and late evening are the best but some days you will find the fish active at all hours.

We would recommend a spinning or spin-casting outfit. Six or eight pound test line is usually sufficient. In some areas where the weed growth is exceptionally heavy and underwater obstructions exist, ten pound test line is better.

SMALLMOUTH BASS

The *smallmouth* bass is considered by many experienced fishermen to be the scrappiest of all fresh water game fish. There is no question that a two or three pound smallmouth on the end of a light spinning outfit can really put on a show. They like to break water, and may jump three or four times during the fight.

Our larger rivers such as the Susquehanna, Allegheny, Juniata, and Delaware contain an abundance of smallmouth bass. Many of the tributaries to these rivers are also excellent. Occasionally the smallmouth will populate the larger dams in good numbers, but generally, they prefer the faster moving waters found in rivers and streams.

Smallmouth bass seem to be most active early and again late in the season. June, July, October, and early November will find the hungry smallmouth ready to attack a variety of lures, plugs, and live bait. The smaller bass plugs, spinners, and spoons work well. Two of the most outstanding lures are the rubber artificial crab, and hellgrammite. These have been used on all the major rivers and will, without doubt, catch the smallmouth. It is also a night feeder, and will readily hit surface plugs at night.

The natural foods of the smallmouth are soft crabs, hellgrammites, and minnows. Any of these, presented properly, will take fish. Many experienced bass fishermen claim that soft shelled crabs are absolutely the best bait for the smallmouth, others favor hellgrammites, and stone cats.

Smallmouth bass can be found lurking in the deepest pools during the afternoon hours. Early morning and late in the evening, they will work out of the pools into the riffles to search for food. For some of the larger waters a boat is most helpful in getting to the area where the fish are, but many times the use of waders or hip boots can put you in position to catch these fish.

Equipment used for smallmouth is much the same as for largemouth. The fly rod can be effectively used in river fishing; and the smallmouth readily strikes large bass bugs and poppers, especially when fished late in the evening.

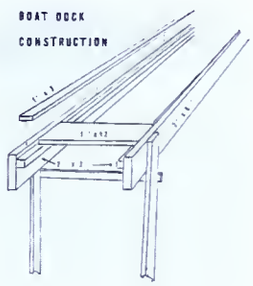
PART THREE—NEXT MONTH!

The Sea Bag

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters

EASY TO BUILD DOCK—



EACH YEAR THE INDIVIDUAL BOAT OWNER is plagued by two major problems: constructing a dock in the spring and dismantling it in the fall.

Frankly, there's no way out of it.

You either work up a sweat lugging around a 10, 15 or 20 foot length of dock, or walkway; or else you find an easier way of doing it.

I found, through a suggestion from a carpenter friend, an easier way to construct a dock. It was tried last spring, tested and found suitable enough to pass along to other boat owners who run into the same problems each spring and fall.

Not only does this type of construction make it much easier for one man to handle during construction and dismantling, but it should also assure a longer lasting dock since everything comes apart and can easily be covered, even those former hard-to-get-at areas, with a coat of paint or other preservative.

It is put together piece-by-piece, dismantled in the same manner, and lag screws or bolts are used to fasten it to the uprights rather than nails or spikes. Don't forget to use washers which will prevent the heads from working into the wood.

Cypress, white pine, spruce or cedar will all hold up quite well in the weather but a local lumber company suggests that fir does just as well.

Only four different sizes of lumber are required. Prices will vary depending on where you purchase your lumber and whether new or used lumber is used in construction. I found, for example, that by using new lumber it would cost slightly over $15 for materials for a 16 foot length of dock. However there are some "cash and carry" yards in business mainly for the do-it-yourself-er, where the same lumber can be purchased for less.

The list of materials, and the average cost, is as follows:

For one 16 foot length dock—

Two 16 foot lengths of 2 by 6 inch lumber	$ 5.44
Four 8 foot lengths of 2 by 2 inch lumber	2.24
Four 8 foot lengths of 1 by 3 inch furring strips	1.28
1 by 12 inch lumber for flooring	8.00
Total	$16.96

Incidentally the only cutting required would be the flooring into two and one half foot lengths, on which the above figuring was based, although you can make it any width you desire.

Also, I would suggest giving everything a good coat of paint, or preservative before assembling.

After your paint job has dried sufficiently, nail two 8 foot lengths of the 2 by 2 inch lumber to the inside of one of the 16 foot lengths of 2 by 6's. Nail them about an inch, or the thickness of the floor boards, below the top edge of the 2 by 6. Fasten the other two 8 foot lengths of 2 by 2 inch lumber to the other 2 by 6 in the same manner.

On top of these 2 by 2's will rest the floor boards which are not nailed down but held in place by the furring strips. Only three or four nails are required to hold the furring strips in place.

However don't assemble this on land, in your basement or garage. If you do you're only defeating your purpose.

After the 2 by 2's are nailed to the 2 by 6's, the latter are fastened to the uprights, either 2 by 4's or 4 by 4's, which have already been set in the river or lake bottom. One end of the 2 by 6 rests on shore, it can be anchored there by a stake driven into the ground, while the other end is attached to the upright with lag screws or bolts.

After both 2 by 6's are in place, it's a simple matter to lay the floor boards in place, nail the furring strips down along both edges and the job is done.

Next fall just rip up the furring strips, tuck the floor boards under your arms, pick up the 2 by 6's (after removing the lag screws or bolts) give everything a coat of paint and store until the following spring. That's all there is to it.

COAST GUARD AUXILIARY CITED

The U. S. Coast Guard Auxiliary has been awarded the National Safety Council's Distinguished Service Safety Award for national leadership in water safety.

The award was based on the following 1967 accomplishments:

1. 128 lives saved.
2. 7,234 assists in rescue missions.
3. Instruction of over 180,000 boat owners.
4. 177,000 courtesy examinations.
5. Patrolling 4,500 regattas.

Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



REAL DUMMY!

■ While attending the Fish Commission exhibit at the Bloomsburg Fair, we had a patrol boat on display. Officer Frank Kann of Laport was sitting in the boat reading the reeent issue of the Pennsylvania Angler when a lady came along and pressed her fingers into his arm several times. As he looked up from the magazinc, the lady, obviously frightenecl, excitedly explained "I thought you were a dummy!"—***Waterways Patrolman STEPHEN A. SHABBICK*** (Wyoming County).

CLOE LAKE BONUS

■ Fishermcn using thc Pennsylvania Fish Commission owned Cloe Lake near Punxsutawney during the extended fall trout season found themselves a bonus, besides the 15 to 18 incl. rainbow trout thcy were catching. Several bass in the 18 to 22 inch class werc taken and also a few large northern pike from 24 to 28 inches were landed.—***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County).

TIDIOUTE TOURNAMENT

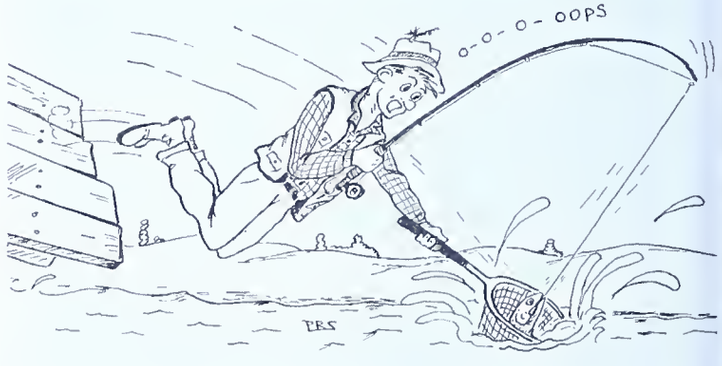
■ While on duty at the State Fishing Tournament at Tidioute, some fishermen eomplainecl that the fishing was no good in the Allegheny River. I took them by the arm and showed them the collection of trophies that were registered at the Water Company Office at contest headquarters. Nearly 165 fish were turnecl in on the first day of the contest. Most of these fish were caught by individuals that arc known experts on the river. It looks as if the old saying that 10% of the fishermen catch 90% of the fish holds true at this eontest.—***Waterways Patrolman BERNARD D. AMBROSE*** (Elk Counly).

PALOMINO APPEAR

■ It seems that the palomino trout waited until the fall extended season to start to bite at Lyman Lake. Some nice ones were taken.—***Waterways Patrolman KENNETH ALEY*** (Potter County).

HAND FED

■ Young Scott Haller of Tionesta was trying to convince his grandfather Lud Haller (Haller's Fishing Contest—Tionesta) that he wasn't trying to catch a trout at Tubbs Run—just trying to pet it! It seems that Scott stuck his hand into the water and Mr. Trout (". . . at least three feet long" said Scott) must have thought it was food and took a bite on a finger. Scott's wound required home first-aid treatment. Scott is just one of the many youngsters who are enjoying the thrill of feeding the big trout in Tubbs Run which were placed there recently by the Pennsylvania Fish Commission after it was announced that a portion of the stream would be set aside for nursery waters.—***Waterways Patrolman JOSEPH KOPENA*** (Forest & Clarion Counties).



LANDING PROBLEMS

■ Recently Speeial Warden Waybright told me that while patrolling the waters in Lebanon County, he saw a fisherman standing on a flimsy boat dock hook a hefty fish and play it perfeetly. But as the fish floated near the surface, the fisherman pickcd up his landing net and leaned over to net the fish. Suddenly the dock tilted and the fisherman did a perfect swan dive into the lake! The water was pretty deep because the man was about 6'4" and all that could be seen was the fish fly he had on the top of his hat. He came out dripping wet, but with a smile on his face, for somehow he had managed to get the fish into the net. The fisherman turned out to be a secretary for one of the Hummelstown clubs.—***Waterways Patrolman SAMUEL W. HALL*** (Laneaster & Lebanon Counties).



POCKETBOOK PROBLEMS

■ Many jokes have been made about a woman's pocketbook, but recently my deputy and I witnessed an incident that beats them all. We were on patrol one afternoon and saw a woman fishing from a dock. We stopped to ask how the fishing was and saw she did not have a fishing license displayed. I asked to see it and she said "just a minute, I have it somewhere in my pocketbook." And this is when the fun began. She started to hunt and dig and it was quite obvious that she had a lot of j-u-n-k in that old pocketbook. The more she looked, the madder she got and we could hardly keep from laughing out loud. Finally, in desperation, she dumped the pocketbook upside down on the dock. You wouldn't believe what fell out! Curlers, salmon eggs, hair pins, sinkers, bobbers, lipstick, comb, hooks, split shot, money, pliers, and a million other odds and ends. And believe it or not, way down at the bottom —the license!—*Waterways Patrolman JAMES T. VALENTINE* (Huntingdon-Fulton Counties).

SPAWNING TROUT

■ I often hear fishermen state "There is no natural spawning of trout in the streams" and this shows many of our trout fishermen are missing one of the most beautiful things found in a good trout stream. For over thirty years I have enjoyed watching trout spawn. It has changed very little. There are plenty of streams in Pennsylvania where a person can find nature at its best. Anyone who enjoys what a good trout stream has to offer, besides fishing, should visit one in the fall of the year and see trout mating habits. The experience of watching trout mating in the wild, is something you'll never forget and can only add to your enjoyment of trouting. And it does happen in Pennsylvania!—*Waterways Patrolman WILLIAM E. McILNAY* (Bedford and Fulton Counties).

BIG EELS?

■ The Republican and New Age Newspaper of Tunkhannock carried this news item in their columns eighty years ago. "The grist mill at Meshoppen had to be shut down due to a very large eel getting caught in the turbine and shut off the water supply." In 1952 while I was helping in the test netting of Pages Pond near New Milford in Susquehanna County, Mr. Gordon Trembley, our present assistant executive director, then an Aquatic Biologist and his crew took an eel forty-eight inches long that weighed nine pounds. Anybody heard of one larger?—*Waterways Patrolman HARLAND F. REYNOLDS* (Wayne County).

FUNERAL

■ While attending the Fish Commission exhibit at Bloomsburg, a friend of mine told me that while stocking Bowman's Creek there were 175 cars in the procession. This man overheard a fisherman remark "That's quite a funeral they are having for those trout."—*Waterways Patrolman STEPHEN A. SHABBICK* (Wyoming County).

MORE DELAWARE MUSKIES

■ Each year about the second or third week in October, the walleye in the Delaware River become quite active. Many fine catches of both walleye and bass reported to me each year in October and November but this year several muskies have been reported from the Delaware. Recently one was reported above Bushkill that was some 35 inches in length and weighed about 12 pounds but I'm sure there are others we didn't hear about. It would be a great help if persons who catch these trophy fish in the Delaware would report them to their Waterways Patrolmen.—*Waterways Patrolman WALTER J. BURKHART* (Monroe County).

DOGGED OFFICER

■ A Dog Law Officer from the Johnstown area had a thermos of coffee along streamside. He had just poured himself a cup when it started to rain. Since the car was not far away, he set the cup down and went for a raincoat. On returning, an overgrown shepherd pup was making off with the cup. However, after a chase and some coaxing the dog dropped the cup and headed back to a farm.—*Waterways Patrolman ANTHONY MURAWSKI* (Cambria County).

SNEAKY FISH

■ Deputy Game Protector Wilbert Sarver and I were working the display booth at the Big Knob Fair one evening when a boy about seven approached me and said, "I went fishing once and almost caught a bite, but it got away." He then leaned over very close, cupped his hand to his mouth and whispered "Them fish are sneaky!"—*Waterways Patrolman DONALD PARRISH* (Beaver County).

LOW BRIDGE

■ During the National Plowing Contest at Hershey last summer I had the pleasure of acting as a guide on bus tours around the town of Hershey. Along the route the bus passed under a low bridge which was also extremely narrow—so low and narrow that clearance on the sides and top were less than a foot. Each time we approached the underpass, I asked the passengers to please duck their heads—it was surprising how many people did just that! —*Waterways Patrolman JAMES F. DONAHUE* (Jefferson County).

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THE QUILL BACK CRICKET

trees behind me. Finally I made a lucky cast that landed just right and a pointed snout parted the water and took the Cricket. The big trout never jumped but he tore up and down the pool several times, occasionally thrashing at the surface, before the constant rod pressure turned his head. Eventually a magnificent specimen of brown trout was netted, a male of twenty-three inches with a hooked lower jaw.

I moved upstream and caught several smaller browns along the pump house wall but the challenge of fishing the slack-water bay downstream fascinated me and I walked back to the big pool. They say lightning never strikes twice in the same place, but would you believe that the next time I cast the Cricket back to the grassy overhang I hooked and landed, after a long struggle for my leader point was 6x, a female brownie of twenty-six inches? That little bay must be a cricket haven for it has since produced a surprising number of big browns to the Q-B Cricket.

The Cricket is primarily a mid and late season pattern but I've taken trout with it in early May. One day last June the sulfurs were emerging in good numbers on Penn's Creek and the trout would scarcely look at them. Yet the Cricket scored time after time on trout that had steadfastly refused the sulfur duns.

The Cricket works best along grass banks because it is here that the naturals are most often found. On flat water it is frequently best to give the pattern an occasional twitch for the trout expect some animation when the natural is on the water.

Although the photo-illustrations show the tying procedure for a black Q-B Cricket, a brown pattern may be tied by substituting reddish-brown deer body hair for the body, dyed brown duck quill for the back and brown Nymo for tying thread. It's a good idea to have a supply of both black and brown patterns on hand.

Tradition has it that a cricket on the hearth is an omen of good luck. So, too, is a supply of "Crickets" in the fly box.

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ICE FISHING PRIMER

bottom. Tie a loop in the line to mark the surface and withdraw it. Stretch the measuring line out across the ice and lay the fishing line along side. Attach a bobber to the monofilament so it will hold the bait about a half foot off the bottom of the lake. To take the bait to the desired depth quickly and then keep it there several split shot can be attached several inches up the line from the hook.

Since it is nearly always cold when ice fishing and the fingers can become numbed quickly it is best to get all the tackle arranged before leaving home. Before each ice fishing trip check to make sure all ice rods are equipped with hooks or ice jigs and that sufficient shot is attached to the line. Once on the ice all you have to do is check depth, attach the bobbers, and bait the hooks.

Probably the most satisfactory way to transport ice fishing equipment across the ice is in a box carried on a sled. It should be large enough to hold everything that is needed, including the ice auger. It can also double as a seat while waiting for the bobbers to dip under the surface.

On certain days when the wind is blowing it may be impossible to stay on the ice without some type of protection from the wind. Some anglers prefer an ice fishing shanty which gives them protection on four sides. Others employ a less elaborate set-up which usually consists of a one or two side wind break built from either plastic, canvas, or cardboard. These have the advantage of being far more mobile.

The wind break I use consists of a single piece of cardboard which is supported by two pieces of wood that slide inside brackets fastened to the back of the box I carry on my sled. To keep these in place when the wind is blowing hard it is necessary to drill two holes in the ice with the auger to give added support so the wind break, box, and sled don't all blow away.

This type of wind break is that it can be easily and quickly erected and can be moved from one place to another on the ice with little difficulty. When the action slows in one place it is a simple matter to raise the wooden supports out of the brackets, lay the cardboard on top of the box, and pull to a new location.

About the only other thing needed for ice fishing is a fire for warmth. A charcoal fire built in a small charcoal grill works well and can also be used to cook hamburgers, hot dogs or your favorite soup.

And many anglers have discovered the small portable heaters which are being marketed by several leading suppliers of camping equipment. These are capable of providing all the heat needed to keep several anglers warm no matter how cold the weather gets.

Both pan fish and game fish are legal to take through the ice, but the beginning ice fisherman will probably enjoy the sport more if he first goes after pan fish for they hit far more often. By taking the time to get properly outfitted for that first ice fishing trip and finding an ice covered lake where the pan fish are co-operative chances are good you will never again lack for something to do on those idle winter days!

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GO COHO-

they run from fresh water to salt water and back to fresh water to finally spawn.

Fisheries biologists weren't sure what would happen when they transplanted salmon to an inland body of water as are the great lakes. But results so far indicate the coho gets along fine without heading out to sea—so long as they have a big body of water to live in and plenty to eat.

As the end of the third year of their life nears they begin heading home—in some experiments back to the very pools where they spent the first half of their life! Sport fishing begins developing as soon as they start schooling offshore from their "home" streams and continues until they start actual migration into the stream. They then quit all eating and ultimately die apparently from starvation after spawning.

Since Pennsylvania's tributaries to Lake Erie are relatively small and pass through many private properties coho fishing has been legally limited to the lake itself with the streams designated as "nursery waters" during the runs. Returning coho will be captured as they enter the streams. Hatchery personnel will then artificially spawn them to provide the needed eggs for continuation of the program. Rather than waste the fish which have evaded anglers and made it into the streams, the carcasses will then be sold on the commercial market to the highest bidder.

Just what next fall will bring is anybody's guess, but if the coho return as expected—well fed and fierce—the twitches of excitment felt in northwestern Pennsylvania last fall will certainly be tremors!

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Ice Fishing DELUXE

The reel is made in three layers with the outer layer carefully beveled to allow the free flow of line. After some experimenting, it was found that an angle of about 40° was best. "Smitty" attaches the reels to the broom stick portion of the rig a few inches below the hinge from there the line trails out to the end of the swinging arm after passing through the trigger.

This latter part is a work of engineering skill in itself. Basically it involves a square of plexiglass that is delicately balanced and sensitive to the slightest tug. It's part of Lee's ice fishing theory that fish ought not to be scared away by trigger resistance or any unusual tension on the line as they take the bait. In his trigger device there is virtually no resistance and there is a natural free flow of line as the fish hits and runs.

The secret of the trigger is in adjusting the plexiglass weight, the curve of the piano wire holding the flag, and the position of the flag itself on the piano wire. When all these things are in order to suit weather conditions, line size and bait being used, "Smitty" is in business.

And that's about it for the tip-ups other than a few incidentals such as repeating the price—about $1.50 per rig. Oh, yes, all the wooden parts have been hand-rubbed and varnished against weathering and the various screws and adjustment fittings are covered with what appears to be a smooth brown plastic easily handled in the cold. "No plastic," says "Smitty," a grin on his face again, "I just dipped the heads of the screws in some old wood glue a few times."

And that's that except for the sled that contains the five tip-ups and other assorted gear. The carryall is in itself a work of craftsman's art with its contrasting dark wood sides and light wood trim. The tip-ups fit in slots in the top compartment which is weather-proof when closed. A series of drawers and compartments slide in and out smoothly at the end of the sled and hold an assortment of gear, some dry clothing and other odds and ends dear to and needed by the serious ice fisherman.

"Smitty" is not to be denied his comfort while out on the ice so his sled has a foam rubber seat at the back end to help ease the strain of any long wait between strikes. And one of the drawers is insulated for food and beverage preservation. "After all," as Lee said, "who wants to eat a frozen sandwich?"

Regardless of the appearance to the contrary, Lee insists that the sled was inexpensive to build. About two dollars worth of hardware covered the money spent. Wood came from odds and ends around his shop. The foam rubber was rescued from a discarded chair about to be taken to the dump. The only real expense was his time, which was a labor of love anyway. Speaking of time, "Smitty" indicated that he had about 24 working hours in the five tip-ups and a bit more in completion of the sled.

Incidentally, when the Chambersburg angler doesn't want to have the whole rig along, he uses his "portable" outfit. The five tip-ups and their carrier were made from a couple of old aluminum lawn chairs and were actually the forerunners of the improved rigs described above. They work generally on the same principal, but "Smitty" prefers his wooden jobs over the lighter metal ones primarily for the case of handling them out on the ice. The wood has the advantage of leaving the skin on his fingers and the plexiglass reels won't freeze as do the metal ones of the "lawn chair" set.

And that would seem to be the story on Lee Smith and his super tip-ups, but it isn't—not quite. As "Smitty" puts it, "They need a little work yet. Next year I'm going to switch to fluorescent orange for the flag color and maybe adjust the trigger a little and . . ."

MODERN CAMPING by DEL & LOIS KERR

NEAR THE JUNIATA

THE JUNIATA RIVER has long been known for its fabulous fishing. It is no accident that several fine campgrounds are located within easy driving distance of this attractive river. They also each have fishing facilities of their own.

In southern Huntingdon County, near the Raystown Branch of the Juniata, is Trough Creek State Park. This 600-acre park is located south from Route 26 at Marlesburg. Consisting of only 30 campsites, it is one of the smaller camping areas among the state parks and is not as crowded as many of the larger ones.

Throughout the week a choice of campsites is readily available but it is advisable to arrive early Friday for weekends in the middle of the season. All sites are in an attractive wooded setting. Sanitary facilities are pit type. The nearest store to purchase food supplies and ice is approximately six miles.

Great Trough Creek which meanders through the campground is stocked by the Pennsylvania Fish Commission. Game species available are trout and bass but suckers and bluegills are abundant. The stream empties into the Raystown Branch of the Juniata approximately two miles from the park.

A more heavily used state park in the area is Greenwood Furnace in the northern part of Huntingdon County. Located on Route 305, four and one-half miles east of McAlevy's Fort, this park also has 30 developed campsites. There is also an overflow area which has a capacity of about ten additional units.

The campground is located in an open area but most sites have some shade. Central feature of the park is a five-acre lake formed by damming up East Standing Stone Creek which runs through the campground. The lake is only about 200 yards from the camping area.

Swimming and fishing are the principal recreational activities. The lake is stocked with trout. Ice is available at the campground itself and groceries and gas are within four miles.

Further east, in Mifflin County, there is a very fine private campground located near McVeytown—Idle Acres Camping Area. There are 40 spacious grassy campsites, each 40 x 40 feet, about half of which are shaded and half in the open. Open full time from Memorial Day to Labor Day, the area is also open weekends only during May, September and October.

This is an ideal spot for the fishing family with small children. Plenty of activities are available to keep the little ones amused. A unique feature of the playground is a giant "Time Tunnel" slide converted from an old schoolhouse fire escape. This alone keeps the children amused all day. Swings and a tether ball are also provided.

Right on the grounds of Idle Acres are two natural limestone caves. Both are state safety approved. Campers can freely explore them at no extra charge. Family hikers have four trails from which to choose. Three of them take about one hour to hike and the other takes two hours.

Twenty-eight sites have electricity. In the washrooms, flush sanitary facilities, tiled showers and mirrored vanities provide most of the comforts of home.

A small, ¼-acre pond is located on the grounds. Messer Run stocked with trout by the Fish Commission goes through the area. The Juniata River offering fine bass fishing is only ¼-mile away.

Groceries, gas and ice can all be found within walking distance from the campground at McVeytown. Lifeguarded swimming can be found approximately ten miles away at Greenwood Furnace State Park or at Kiskacoquilas Amusement Park.

This would also be an ideal spot for anyone who may have been wishing to try camping, but does not want to buy a lot of expensive equipment for that first experience. Owners Don and Joyce Fuhrer have rental equipment available. You can choose between an 8 x 16 tent or a fully equipped 8 x 20 trailer. The Fuhrers would be happy to supply you with rates and information.

Nearby are several attractions of interest to those interested in methods of transportation. At Lewistown is Jack's Creek Bridge built in 1813 to serve the original Pittsburgh-Harrisburg turnpike, the only stone arch bridge in Pennsylvania built without a keystone. At Strodes Mills you can see three locks of the old canal. East of Lewistown there can be seen five types of transportation at once, the paved highway, parts of the old "pike," ruins of the canal, the Juniata River used for boating and the tracks of the Pennsylvania Railroad.

East of Huntingdon on Route 22 is the Swigart Museum which has a large display of antique automobiles, nameplates, license plates and other automobile parts. The museum is open from June 1 through Labor Day. Thirty-six miles south of Lewistown on U.S. 522 is the East Broad Top Railroad, the last steam powered narrow-guage railroad east of the Mississippi River. Tourists may take a ten-mile trip over valleys and streams.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



JONESTOWN ANGLER Gordon Strauss Jr., 7, holds a 19-in., 4-lb. largemouth bass that won him a Pennsylvania Angler Junior Fishing Citation. He caught the big fish from Shuey's Lake in Lebanon County. It took a black rubber worm fished with spinning gear.

FISHERMAN Iver M. "Smoky" Stover of Harrisburg holds a 35½-in., 10-lb. northern he caught last spring while fishing at Falmouth access area on the Susquehanna River. He also landed three muskies—40-in., 37-in., and 31½-in. All were caught on a bucktail.





DENTON CARLSON of Coulter holds Citation winning smallmouth that measured 21¼-in. and weighed 4-lbs., 10-oz. He caught it while fishing the Allegheny River last June. It hit a mepps spinner.



NEW STANTON angler Earnest Beckett (right) landed a 32-in. northern during the dedication of the new High Point Lake. Shown with him is Robert J. Bielo, Executive Director, Fish Commission, who attended the dedication ceremonics.



NOT MANY FISHERMEN manage to catch a citation size fish but angler Joe Kuba landed a 15½-in. yellow perch and a 23½-in. largemouth bass. Both were caught on spinning tackle and a plastic nightcrawler from Twin Lakes.



TEN-YEAR-OLD Jerry Reynold, York, holds a 27¼-in., 6-lb. walleye he caught at Pinchot Lake in York County last fall. The catch won him a Pennsylvania Angler Junior Fishing Citation.

COHO SALMON was hooked by Richard Beckman, 5, of Erie, while he was trolling with his Dad in Lake Erie during October near the mouth of Trout Run. It measured 20½-in., weighed 4-lbs., 12-oz., and took a mepps.

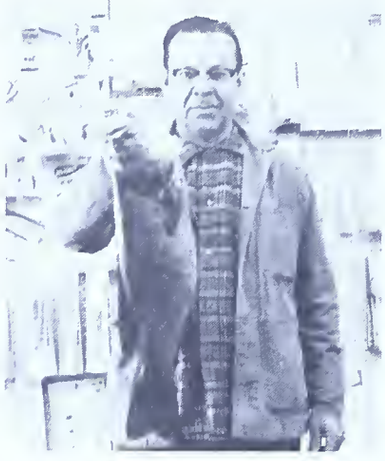


FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



ANGLER ARCHIE CAMPFIELD of Hawley holds rainbow caught at Lake Wallenpaupack. It measured 19-in., and weighed 2½-lbs., and won him a Fishing Citation.



HENRY MITTERLING of Sunbury holds 22¾-in., 5-lb., 6-oz., smallmouth bass caught last fall fishing the Susquehanna. He used spinning gear and a minnow.



CONTEST WINNER Warren Feathers of Claysburg holds 24½-in., 6-lb., 2-oz., rainbow he caught from Potter County's Lyman Lake last spring to become the winner of the rainbow division of Potter County Big Trout Contest. He used spin gear.



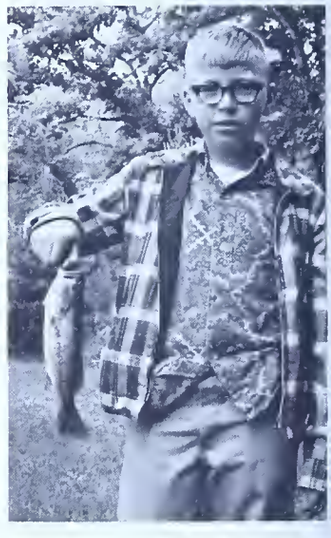
BETHLEHEM Angler Thomas Andrew won a Junior Fishing Citation when he hooked and landed this 14¼-in. brook trout from Monocacy Creek.



JIM SMITH, 16, of Berwick holds 25-in., 5½-lb. walleye he caught last year while fishing the Susquehanna River. He used spin gear and worms.



BIG CATCH for little fisherman! Kurt Schenkemeyer, 4½, Johnstown, holds 15½-in., 1½-lb. bullhead he caught while on a fishing trip to Raystown.



BOB HOLT of Somerset holds 11¼-in. largemouth bass that tied him for third place in a contest held at the Charles Farm Pond in Somerset.



WILLIAM GUARINO of Ransom holds 22-in. catfish he caught near his home from the Susquehanna River. He was using nightcrawlers and spinning gear.



FISHERMAN Gerald Teitze of Smithton holds stringer of trout caught from the Yough. All were caught on one outing.



LOYALHANNA ANGLER Lawrence R. Hausele received an honorable mention membership in Pennsylvania's Husky Musky Club last spring when he landed this 36½-in., 9½-lb. musky. He was fishing Lake Somerset. Bait used, not given.



ALLENTOWN ANGLER Kenneth Hilbert won both Junior and Senior Angler Fishing Citations when he caught this 16-in., 2-lb., 4-oz. bullhead from Jordan Creek last fall. The 15-year-old fisherman was using spinning gear and crawlers.



STARTING TO be caught in the Allegheny River are some good size flathead catfish. This one weighed 24-lbs., measured 36-ins., and was caught by fisherman Charles Chaball III. He was using spinning gear and a sucker for bait.



PYMATUNING LAKE produced this 23-in., 8½-lb. channel catfish for fisherman John Greenawalt of Linesville last summer. Mr. Greenawalt was fishing near Harris Island when the big fish struck a worm.



BETHLEHEM FISHERMAN David St. Clair holds 24¼-in., 8-lb., 14-oz. largemouth bass that won him his Pennsylvania Angler Fishing Citation. He was fishing Pike County's Mink Pond when he caught the fish on a rubber worm and spin gear.



MARYLAND FISHERMAN Joseph C. Mooney of Cumberland holds 24¼-in., 4-lb. chain pickerel he caught at Koon Lake in Bedford County last fall. He was using ultra light gear and a mepps spinner when he made the catch.



DWAIN SEESE, Homer City, (right) holds stringer of brook and rainbow trout caught from Moore's Run. One brook trout won him an Angler Citation.



DALE RANSOM of Genesee took first place in the brook trout class of the Potter County Big Trout Contest last year with his 16¼-in., 2-lb., 4-oz. brookie. He caught it opening day on a worm.



THIRTEEN-YEAR-OLD Jack Bunnell of Courdersport holds 21-in., 5-lb., 6-oz., brown trout caught from the Allegheny River last summer to take first place in Potter County's Big Trout Contest.



JUNIOR CITATION WINNER Charles R. Holbein Jr. of Butler stands with the fisherman who taught him, James Robison. The smallmouth bass he's holding measured 19¼-in., and weighed 3¾-lbs.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

POLK STATE SCHOOL

INNOVATIONS IN construction and management are the order of the day in many of the cooperative nurseries scattered around the state. The Polk State School and Hospital Nursery in Venango County is no exception to this premise. Let's take a closer look at it.

The original project was started on the hospital grounds in 1959, but the current nursery and rearing pond has been used about seven years. According to Gaylord Brooks, activity aid at the school, there have been as many as 150 resident students involved in the nursery work at alternate times during the last several years. During the summer months, this group is narrowed down to about 20 to keep the grounds presentable and do the feeding and algae skimming necessary to keep the pond in good order and the fish healthy.

But this does not deal with the innovations mentioned above. Back to them! The first item to attract attention is a small shed containing an air pump, electrical equipment to operate it and a long, round brass aerator in the pond itself. The aerator is the first we've encountered in more than a year on the cooperative nursery trail.

Functional use of this equipment is to solve oxygen problem in warm weather. The nursery is an oval-shaped pond with a somewhat limited water source. As a result, temperature and oxygen problems create trouble for the boys manning the project. The aerator was discussed, devised and implemented and seems to have resolved the issues of the moment. As cooler weather develops, the air pump is turned off and the fish continue to thrive in a more natural environment.

Mr. Brooks and his boys didn't stop at this point but went on with other phases of the project that were new and interesting. For one thing, they experimented with raising suckers and minnows from eggs. Most cooperative nursery projects at the moment concentrate on trout. But these fellows expanded their efforts into other species. The results were successful enough to supply area bait dealers with a reasonable number of minnows and young suckers to be sold for bait. This was a legitimate aetivity, properly approved by the school and the Fish Commission, and most of the money received from the sale of the minnows was put into the Occupational Therapy Fund which helped finance the trout nursery. So much for the second variation from the standard theme of many cooperative nurseries. Now let's go to another.

The third interesting feature of the Polk State School Nursery project was the use of homemade food pellets. Again Gaylord Brooks was our informant. He indicated that a large farm is part of the general facility. Meat, raised on the farm and utilized in the school kitchens, produced a certain amount of waste products. This material was reclaimed by the students and pellets were formed. Pig blood, ground livers and spleens, and other similar tidbits were ground together, pressed into pellets and baked. The end product was an acceptable trout food that, when fed, resulted in reasonable fish growth.

Harry L. Watkins, Director of Recreational Activities at the school, chimed in at this point with a note of support for the food experiment. "It continues the project for us and is of considerable interest to the people involved. It gives them a continuation of their work and a greater sense of accomplishment in producing their own food and they see the results as the fish grow and mature," he said in effect.

Now all this is well and good for the innovations and the worthwhile activity angles, but what of the fish themselves? The nursery annually produces about 2,000 brook trout. Where do they go? Well, the school and nursery are located in Venango County and according to Waterways Patrolman Clarence Shearer, "The county gets them." "Actually we put most of them in the Little Sandy Creek near Polk on Route 62," he continued. "It's a pleasant little stream that courses for about six and a half miles in the general area of the school."

And that was about it for the Polk State School Nursery visit. Paul Byers, assistant cooperative nursery coordinator, gathered up his water testing kit; we took a last look at the spacious, well-kept grounds of the school and said goodbye to our hosts.

One thought that remained in our minds as we drove along part of the Little Sandy, headed back for Franklin, was that *Casting with the Co-ops* does more than just improve the sport fishing in a given area. It also provides worthwhile educational opportunity and occupational therapy for some of those involved.



THREE RESIDENTS at the Polk State School look at the raceway where the 2,000 trout that they rear each year are held.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

FROM C. E. F., KITTANNING:

"How can I get my 22-foot inboard cruiser to handle better at low speeds and in reverse; would a larger rudder help?"

—Increasing the size of the rudder will make your boat easier to maneuver when going astern or maneuvering at low speed, but the added blade area will cut your top speed and probably increase the boat's tendency to sheer off course unless the wheel is held tightly. Any production boat is the result of many compromises, and in your craft the manufacturer sacrificed low speed handling ability for a relatively high cruising speed with moderate horsepower and economical hull construction. Rather than modifying the rudder, we would recommend practicing boathandling so as to get the most from what you have to work with.

FROM L. G. E., MONONGAHELA:

"What type of depth sounder would you recommend for an outboard runabout used on the rivers and lakes?"

—Several manufacturers offer battery-operated models that use ordinary flashlight cells, which show the depth on a dial similar to a tachometer. This type is more useful than the flashing-light sounder on a small boat, since bright sunlight may make it difficult to see the flashes that indicate the reading.

FROM A. J. B., PITTSBURGH:

"Where can I get information on purchasing a kit of precut parts to build a boat?"

—Two firms which offer a wide selection of boat kits are: Glen L, 9152R Rosecrans, Bellflower, Cal. 90706, and Luger Boat Kits, 9200 Interstate 35W South, Minneapolis, Minn. 55431. Both companies will send catalogs on request.

FROM T. V. H., JOHNSTOWN:

"Where can I get parts for a 'Hot-Rod' outboard motor?"

—We suggest writing the manufacturer, Swanson Outboard Service Co., 5215 Lakeland Ave. N., Minneapolis, Minn. 55429. So far as we know, there are no dealers in your area who handle this engine.

FROM G. P. S., MEYERSDALE:

"The used boat trailer I bought has bad wheel bearings, and the only name I can find on it is 'Kingfish'; where can I get replacements?"

—This trailer is no longer manufactured, but any large bearing supply house should be able to furnish replacement bearings. Take along your old bearing and the seal, if any, so they know what you are looking for.

FROM J. E. H., GEORGETOWN:

"Is it possible to repair an aluminum outboard propeller, and if so, who does this kind of work?"

—We are informed by Ted Miller, of Mercury Outboard Sales, Export, that his shop repairs aluminum propellers as well as bronze. Provided the blades are not too badly chewed off, a reconditioning job generally runs about half the cost of a new prop.

FROM W. J. E., PITTSBURGH:

"If I buy a used boat from a dealer, who then goes out of business without paying the original owner who left the boat with the dealer to be sold, can the original owner take back the boat I have paid for?"

—There are quite a few questions of law and of fact involved here, and the result could go either way, depending on how the transaction was arranged and what papers were signed by the various parties. We would suggest retaining a competent attorney.

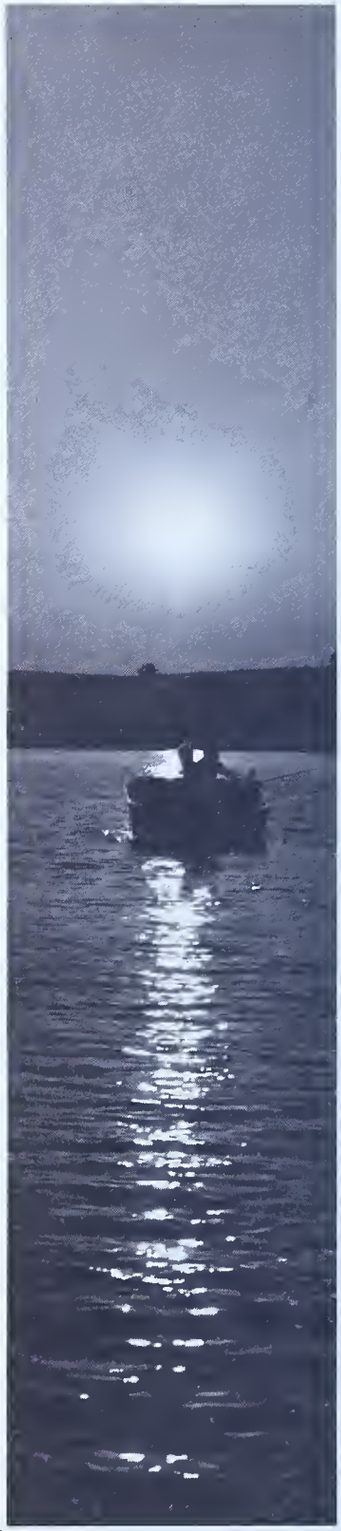


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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



FISHWAYS—PART II

The long standing issue of obtaining fish passage facilities at Conowingo Dam, which is located in Maryland and which blocks any upstream migration of American shad, striped bass or other migrating fish can be resolved.

Fishways of several types have been proven successful and in many places where American shad occur, fishways do pass shad each year.

Additionally, a long and detailed study has proven the Susquehanna River is suitable for incubation, hatching, and survival of shad eggs and larvae. The same study established that the river is suitable for the development of young shad. It also was shown that young shad can successfully migrate downstream and pass through the impoundments and through the dams that block upstream movement.

Even more significant was the finding of 13 juvenile shad that logically were the progeny of adults stocked above the dams. These 13 specimens presumably are the first shad naturally propagated in the Susquehanna River in Pennsylvania since 1928 when the Conowingo Dam sealed off this great stream from the natural occurring upstream runs of marine fish.

Seemingly there is much strong evidence that the Susquehanna River can once again serve to bring American shad and striped bass to Pennsylvania.

In view of this biological and engineering evidence we must assume the real barriers to free movement of shad in our river are in the minds of men—men who hesitate to take the step that will truly prove once and for all whether or not fish that have moved upstream to the base of Conowingo Dam can be attracted into a fish trapping device for passage over the dam.

This trapping device is essentially the first part of a permanent fishway and is expensive. However, until this crucial biological and engineering effort is made the matter remains at a standstill.

The argument by those who wish to continue studying this matter and who believe much more evidence is needed before undertaking the design and construction of a basic trapping facility is that if it doesn't work someone will be embarrassed.

After forty years of delay in resolving this loss of a potentially great recreational resource it seems there should be little room for more embarrassment. Pennsylvanians want action that goes directly to the question—can we build fishways that will work or can't we and this question can only be answered *after* we take the first step and build the attraction and trapping device and operate it for a few years.

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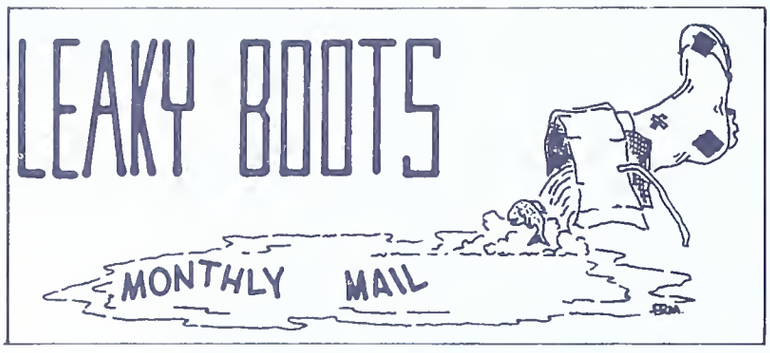
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NOVICE SPINNING SUCCESS

Gentlemen:

I have been reading your Pennsylvania Angler for quite some time and I enjoy it very much. Your section called Leaky Boots is very good and the letters from other readers are very interesting. So at this time, if I may, I'd like to speak out regarding the trout situation here in Pennsylvania from my viewpoint.

First let me talk about the advent of spinning years ago. When trout were planted in our bigger streams they had a chance to survive the early season pressure as the average fisherman couldn't get to them. Today anyone can put on two or perhaps three buck shot and make a cast across most of our creeks. The result is that more fish are taken not by the expert but by the novice. Anyone can be a master fisherman in an hour or two. Why can't some of our trout creeks be off limits to spin fishermen?

I would also like to see a special trout stamp issued. The extra money could be put to use in a good many ways to improve fishing. I also think the age of a license could be lowered to, say 14, as children can quickly be experts because of spinning gear.

I would also like to see the return of the fishing button, as it was easy to spot. Today when you go fishing it's hard to see if those fishing beside you have a license. The majority of fishermen I encounter on the creeks have their licenses in their pockets—or they have none at all.



"JUST REMEMBER TO KEEP A FIRM GRIP ON THE ROD AT ALL TIMES . . ."

In closing I'd like to thank you very much for reading my letter. I think the Pennsylvania Fish Commission does a very good job. My comments are in the best interest for the good sportsmen, not the "fish hogs" who want a full creel every time they go fishing.

Larry Souchak, Mahoning City

NO BOATING, CAMPING

Gentlemen:

I'll venture to say that all readers of the Angler receive one outdoor magazine and over fifty percent more than one, in which we get all the dope on boating and camping that we need. We want the Angler for information on angling in Pennsylvania, fly tying and stream conservation news. Please no more historical (Pithole) stuff. It was interesting, but made no mention of the pollution that took place.

Jim Bray, Guys Mills

FRONT TO BACK

Gentlemen:

I was particularly interested in Mr. E. H. Blackburn's letter in the December issue of the Angler describing his solution to the south-paw fly tyer's dilemma. His method of hackling dry flies front to back, with the tie-off behind the hackle, is one used extensively by the late Paul H. Young of Detroit who, in his day, was one of the nation's finest fly dressers. Mr. Young's book, "Making and Using the Fly and Leader," fully describes the method. Paul Young was a right-hander but his logic was much the same as Mr. Blackburn's, stated thus in the book:

"My aim in making the finishing knots at the rear of hackles rather than at the eye of the hook on all flies where it is possible, is first to protect the tie-off; second to leave a small, neat head and third to avoid depressing the hackles at the front end of fly, backward and underneath the hook, which tying off in front of hackle is bound to do."

This little book is now out of print but anyone who can find a copy in a used book store will find it full of original and practical ideas for the fly maker.

I am right-handed but I use the front-to-back hackling procedure a great deal, particularly with up-wing palmer dries. Here I tie in my hackles just in front of the wings, spiral the thread in spaced winds over the dubbed body to the bend. Now the thread is out of the way and I can wind the hackle over the path of the thread and never have to remove my forefinger from the hackle pliers. (The conventional hackling method requires changing hands constantly.) The hackle is tied off at the rear of the body and

the dubbing is picked out a little with a needle to cover the windings. Then a whip finish of three turns is made on the bend, *beneath and snug against the base of the tails.* It isn't as practical to use this method for downwing flies like caddis or stoneflies where the wing is tied in last and the fly is finished over the wing butts.

I know several excellent left-handed fly-tyers who use a pedestal vise or one that permits turning the upright shaft around so that the jaws point to the left. This allows a south-paw to maintain the same directional relationship to the hook as the right-hander with hook pointing to the right.

Mr. Backburn is to be congratulated for throwing away the rule book and finding his own solutions to his problems. Many fly makers tend to be traditionalists and there is a need for more original thinking in the area of fly-tying.

In Pittsburgh the Penn's Woods West Chapter of Trout Unlimited annually sponsors several fly-tying courses. One of these is an advanced course in which we try to encourage creative tying. Students are exposed to many off-beat and original tying methods and it is gratifying to see tyers use some of these methods in combination to come up with totally new patterns, distinctively their own. Modern day fishing pressure seems to make trout more and more sophisticated and anyone who can come up with more accurate representations of the naturals is helping his own cause.

Chauncy K. Lively, Pittsburgh



KING SIZED COPPERHEAD

Gentlemen:

Enclosed is a photo of a copperhead I killed in August on Kirchner's Hill south of Sunbury. I had, a few weeks earlier, killed a smaller copperhead at the same location so I believe this may have been the mate.

A couple of days after the first snake was killed I was apparently attacked by the larger snake as I approached the vicinity of his lair.

This snake measured 34½ inches. I would like to know if this approaches record proportions as I noticed right away how very large it was.

Edwin F. Beistel, Sunbury

LETTERS

Letters intended for publication should be addressed to Leaky Boots, Pennsylvania Angler, Pennsylvania Fish Commission, Box 1673, Harrisburg, Pennsylvania 17120. Unsigned letters will not be published, but writers may request that their name be withheld.

Pennsylvania's record size copperhead as published in the Pennsylvania Fish Commission's Reptiles and Amphibians pamphlet is 42 inches.

USE REFRIGERATOR

Dear Sir:

May I say how very much I have enjoyed reading the Pennsylvania Angler. I have found it interesting, informative and amusing.

A recent contributor lamented that he had found no way of keeping night crawlers during the heat of the summer. This is easy. I kept some in the lower part of my refrigerator for three months with a commercial worm compound. I turned the container every couple of days. There was no odor and the worms remained as lively as crickets.

Of course I had no irate wife with me to protest, but a dedicated fisherman could obtain a small battered old refrigerator especially for the purpose.

Mr. H. Stableford, Levittown



"YEAH, BUT YOU SHOULD HAVE SEEN THE ONE THAT GOT AWAY!"



FISHING OUTLOOK

By-- Stan Paulakovich

THE MONTH OF MARCH offers anglers throughout the state many excellent avenues of escape from being cooped up after a long hard winter. As Old Sol warms up to his task and melting snow and ice and budding plants and bushes start to spring up, the urge to do a little fishing becomes almost unbearable.

First of all, many of our lakes, ponds and dams still have good safe coverings of ice and these, up until the closing of the warm water game fish season on midnight March 14 still produce respectable catches. All of our larger streams and rivers have some areas of open water and here walleyes and muskies can be coaxed into taking a jig or a spinner. Where warm water discharges enter these waters fishing is exceptional.

For those trout fishermen who can't wait to wet a line a second possibility affords itself. Scattered over the state are five FISH-FOR-FUN areas where trout fishing with flies only is permitted all year long. Regulations for these areas and their locations are incorporated into the 1969 Regulations and Summary Booklet. For the novice who has never fished flies or for the old pro, these FISH-FOR-FUN streams, where trout are returned to the water, are guaranteed to excite you. Remember when fishing these streams that the trout in them have seen plenty of flies, streamers and nymphs of every description and color and are very wary and leader shy. Tippets of no more than three pound test are recommended. Streamers in bright gaudy colors and nymphs in dull, drab shades of grey, brown and green tied on hooks as small as size 22 seem to produce best during March. A small split shot or wrap-around lead will keep your nymph down where it will be most effective. Once in awhile during a bright sunny day fish can be taken on the surface using small dark colored flies. Don't be afraid to use small ones. Size 28 will often take these trout when nothing else will.

The third and possibly most exciting of the fishing potentials for March is sucker fishing. Over the length and breadth of the state the sucker, disliked by many for its bleary eyes, turned down rubbery mouth and its many bones finally comes into its own. The sucker now is on its annual spawning run and heads upstream looking for areas to deposit eggs. At obstructions to migration or at the mouths of tributary streams to our lakes and rivers, sucker fishing during March can be fantastic.

And March is an excellent time to take the children fishing. Boys and girls who are just beginning to fish don't care what kind or how big they are. A gob of red worms and a rod and line rigged with a heavy sinker to keep it steady in the heavy current is all that's required. When the suckers are co-operating and the rod tip keeps bouncing up and down, you'll have all the excitement you need to keep warm.

Most suckers are in the 12 to 16 inch class with an occasional one being taken over 20 inches. Our known state record was taken in 1938 from French Creek in Crawford County. It was 28 inches long and weighed 9 pounds 12 ounces. This was probably a red-tailed sucker which is native to the Allegheny River watershed. Favorite bait for the sucker is the small red worm. Several of these should be put on your hook, size 8 preferably, at one time and they should be put in a ball rather than strung on as for trout. Other baits used include meal worms, grubs and night-crawlers.

All of our major rivers—the Allegheny, Juniata, Susquehanna and the Delaware—have good sucker populations. Along these rivers where tributary streams empty, the dedicated sucker fishermen congregate each March. Some of our trout waters are also open to sucker fishing between March 14 and the opening of trout season.

I've heard of several ways to prepare suckers. One method is to cut down along each side of the dorsal fin and slice the fillets away from the rib cage. If care is taken and a sharp knife used a minimum of bones will be in the fillet. Another method is to skin and clean the sucker, then parboil it for about ten minutes in lightly salted water. Next pick all the meat away and use for fish cakes or fish chowder. The meat during March is solid, white and flaky. When prepared properly there is no better eating.

The North Branch of the Susquehanna River from Berwick to Sunbury offers tremendous sucker fishing during March. All along this stretch, at eddies and at the mouths of streams many can be readily taken. Waterways Patrolman Bob Perry (R.D. #4 Bloomsburg 17815 Phone 717-784-3410) says that many stringers full of suckers leave this area each year. For Western Pennsylvanians the lower Allegheny River at the foot of locks 5, 6, 7, 8 and 9 and at the mouths of Pine Creek, Mahoning Creek and Redbank Creek can't be beat. Waterways Patrolman Tony Discavage (Box 528 Kittanning 16201 Phone 412-542-4021) rates this as one of the best areas in the state.

See you next month.

COMING - - -

WATERSPORT SPECIAL

Next month Pennsylvania Angler readers will have a real handful of reading—April's issue will be sixty four pages big, largest edition ever printed! Included will be a wide variety of features of interest to boaters and fishermen who begin enjoying a new season of popular watersports each spring. Featured in the special will be guest articles by a number of well known writers as well as all our regular contributors.

STREAMS CLOSED

Many trout streams throughout the state are closed to all fishing from March 14 until the opening of trout season. Fishermen should be careful to check their Summary of Fish Laws (issued with each license) before wetting any lines.

WHITE WATER

With March's melting ice and snow many streams become hotspots of adventure for outdoorsmen who climb aboard canoes, kayaks, and survival rafts for some exciting rides on the high water. If you're heading for a trip downstream on some favorite Pennsylvania waterway this month keep in mind these high waters are cold and can be dangerous. Life saving devices and an extra set of dry clothing could save the day.

STOCKING

The stocking of Pennsylvania's many streams and lakes begins in March and continues into early April. Many sportsmen may well find they'll want to be on hand during stockings to help carry and release the thousands of fish which will be released during the next few weeks. A word of caution—keep an eye open for passing vehicles and be sure young helpers use care in crossing highways, particularly along main roads where traveling motorists may not be expecting you!

SEASON'S END

Bass, pickerel, walleye, muskellunge, and northern pike fishing in Pennsylvania comes to a halt for awhile on March 14. Anglers after these species should get their fishing in before that date. However, a few waters are open under special regulations —listed in the 1969 Summary of Fish Laws.

SUCKER SEASON



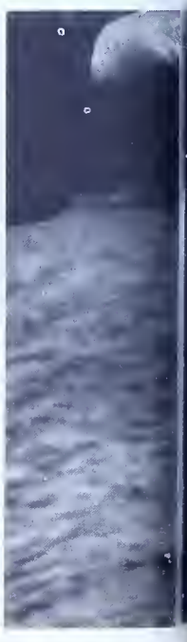
FISHERMAN STANLEY COUGHLER of Knox in Clarion County holds stringer of suckers he caught fishing Tionesta Creek at the outflow of the Tionesta Reservoir.

by TOM EGGLER/ photos by Steve Szalewicz

SUCKER FISHERMEN line the shores of many Pennsylvania streams each spring for some relaxing moments sucker fishing. Garden worms do the trick.







BY SOME THE SUCKER IS REGARDED AS A DELICACY. BY OTHERS HE'S JUST PLAIN FUN TO CATCH. AND BY A FEW HE'S JUST A GOOD EXCUSE TO GET OUTDOORS FOR THOSE DELIGHTFUL MOMENTS OF EARLY SPRING.

WHATEVER YOUR REASON DON'T HESITATE TO ENJOY THIS RELAXING SPORT THIS MONTH!

AS THE WINTER'S ICE TURNS to water an urge to join the budding life outdoors suddenly stirs in the hearts of many Pennsylvania fishermen who have been waylaid with an illness known to most as "spring fever."

The windy but often pleasant weeks of March awaken many anglers who, like much of the rest of the world's life, hibernate during the cold months. The desire to dig out the old fishing rod and head for a favorite stream grows especially strong on those days when the returning sun overwhelms the wind for a moment and warms the chilly earth.

Many fishermen look forward each spring to sucker fishing and some enjoyable moments along the usually swollen streams. In it's own way it's probably awaited as much as many other more "sophisticated" phases of the fishing sport. To a lot of anglers it's a good reason to get outdoors and enjoy the changes of a new season.

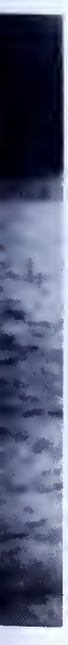
A bottom feeder with a mouth that matches the name, suckers are mostly caught on that favorite garden hackle—worms. Impaled on a number 10 or 8 hook the worm is cast into likely spots with enough weight added to hold it in place. And from then on it's just a matter of waiting for the action. It may come within a minute or two or not for an hour. But when the line starts to move—sometimes quickly, sometimes slowly—the fish have taken the bait. Some anglers keep their catches while others turn them loose but those who want to take home a real stringer full have the opportunity. The limit is fifty. And that's plenty for most family cookouts! Although bony, suckers are relished by many fishermen who look forward to making meals from them every spring. Probably one of the most popular methods of preparing calls for soaking in brine and then smoking.

Equipment used can be as basic as the angler wishes. Suckers have been—and will be—caught by fishermen using fly rods, casting rods, and spinning rods as well as the faithful old cane pole. But whatever the rod, the method is usually the same—worms or nightcrawlers fished on the bottom.

Anglers planning some early spring sucker fishing have a big choice of places to try in Pennsylvania, but they should first check their "Summary of Fish Laws" given with each fishing license. From March 14 until the opening of trout season many streams are closed to all fishing and an angler too anxious for a stringer of suckers might find himself (or herself) illegally fishing a closed stream. A list of the closed streams is published in the summary as well as a list of those trout waters open to sucker fishing. If in doubt anglers should contact their district waterways patrolman.

Been hit with the spring fever bug? Fight it off with a sucker fishing trip!

PROBABLY THE HARDEST part of going sucker fishing is digging the worms. From then on it's just a matter of picking the right spot, rigging up, and waiting for the action. With a little luck it usually doesn't take long to bring home a nice stringer of suckers.







DO-IT-YOURSELF WORM BED

It's easy to save yourself the nuisance of digging worms (or the cost of buying them) every time you decide to give the old "garden hackle" a workout. Just . . .

GROW YOUR OWN!

by DALLAS P. KERR

EVERYTIME I PLUNK DOWN 30 or 35 cents for a dozen nightcrawlers I think to myself that if I could just put this money into a jar in a year or so, I could buy myself a new rod and reel, or maybe even an outboard.

For those who don't have to save for something this simple worm bed wouldn't be of much value but, for the majority of us who not only like to save a buck as well as have fresh worms available, this worm bed can be handy. The only obstacles that I have run into is getting my wife in the right frame of mind (my worm bed is kept in her area of the cellar) and in catching one pesky mouse who really loves to eat worms. Even though I keep my worm bed covered, this little fellow still manages to eat more than his share of crawlers. Invariably, he'll attack at night and, by actual count, he can go through two dozen crawlers in a setting. He must eat them for an appetizer, main dish and desert!

The box for a worm bed is a simple thing to build. Although I bought new lumber and material any scrap lumber you might have around the house could be used. Just don't use any metal because rust will form quickly and the acid in it will kill worms faster than anything.

A two foot, four inch square box by six inches deep will hold three or four hundred worms comfortably. It is lightweight, easy to find space for, and can be carried in the trunk of your car when going on short fishing trips.

A bill of material follows. (see picture for plans)

4 pcs.—2 ft. 4 in. x 6 in. x 1 in. (sheeting grade lumber).

1 pc.—2 ft. 4 in. x 2 ft. 4 in. x ½ in. plywood for floor.

4 pcs.—¾ in. x ¾ in. x 2 ft. 6 in. strips for cover frame.

1 pc.—2 ft. 7 in. x 2 ft. 7 in. window screening (cut to fit).

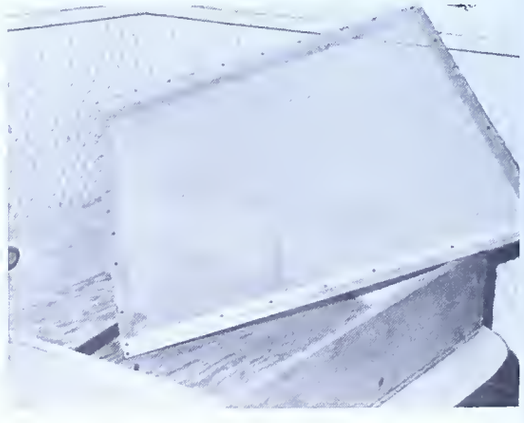
½ lb. 2 inch nails.

1 small box of screen tacks.

(This material cut to size and delivered to my house cost only $4.25 and it took me less than two hours to assemble.)







Before nailing the 2 ft. 6 in. x 6 in. boards to the plywood bottom, drill a dozen 1/16 inch holes at random in the plywood, to allow for correct drainage. Although nightcrawlers need plenty of moisture any accumulation of water will quickly kill them.

Actually the box is only the minor part of the "worm bed" project. The ingredients that go into the box are what keeps the worms fresh and healthy. After trying a number of "recipes," so to speak, I've finally come up with a mixture that works well for me. All the products in this mix are sold in tackle and bait shops and in many local hardware stores.

The main ingredient is "Buss-Bedding." This organic product is especially formulated for the storing of worms. It can be used by itself but I like to mix Black Michigan Peat Moss and some dry, concentrated sheep manure with it. These added ingredients lend body to the mixture and help it hold moisture better than when bedding alone is used.

A ten quart bucket provides the perfect container in which to mix the ingredients. Pour the contents of the two (five pound) bags of "Buss-Bedding" into the bucket, and add water a little at a time. After adding about a quart of water, stop and knead it into the bedding until it's completely absorbed. After the Buss-Bedding is mixed then add about one-half bucket of Michigan Peat and two pounds of dry manure to the bedding; keep adding water until you're able to squeeze it freely from the mixture.

Place the mixture in the box and let it set for a day or so before adding worms. After you put the worms in the box, it's very important to add water regularly—but keep the bedding at the same consistency. Always keep the bedding so that you're able to squeeze a little water from it. Another thing that you can add to your prepared bedding is a handful of woolen cloth, cut into one-inch squares. Of course this is optional, but they provide ruffage which the worms seem to love.

A list of the material for the bedding is as follows:

2 five pound bags of "Buss-Bedding."

½ bucket (5 qt. size) Black Michigan Peat Moss.

1 pound of dry, concentrated sheep manure.

1 handful of woolen cloth squares. (optional)



These ingredients, if bought at retail prices, shouldn't cost more than $6.00. This brings the total cost of your "worm bed" to about $10.50. This means that after you have used about 30 dozen of worms from your bed it will have paid for itself. I probably use that many worms the first two weeks of May alone!

There are a number of requirements that should be followed in keeping a worm bed, but if a few important rules are adhered to, you should have a successful bed. Nightcrawlers need to be kept out of the direct sunlight, preferably in a dark area such as under the porch or in the darkest corner of your cellar. Old fruit cellars are ideal. The worms should be kept as cool as possible. Fifty-five to 60 degrees is best, however, they will survive at temperatures up to 75 degrees if the temperature is kept fairly constant. Third, but equally important, they need plenty of moisture. Crawlers deteriorate easily. I find that sprinkling one to two quarts of water over a worm bed every three days will keep the mixture at the right consistency. A sprinkling can is the best thing to use for spreading the water, it spreads it evenly over the bed. Cull out any dead or dying worms; a worm bed is much like the "old apple barrel"—one bad one can spoil the rest.

Many things that can be fed to worms, and once again, through trial and error, I find that my special mixture does a good job. I use one cup of "Mother's Oats," ½ cup of Yellow Corn Meal and a small handful of coffee grounds mixed together. Sprinkle this mixture over the top of your worm bed and when it disappears in a day or so, repeat. But don't add it more than three times a week. Overfeeding will sometimes produce drastic results. Left over lettuce and cabbage leaves can be used, and work well in an outside bed, but when kept inside for any length of time they give off a foul odor.

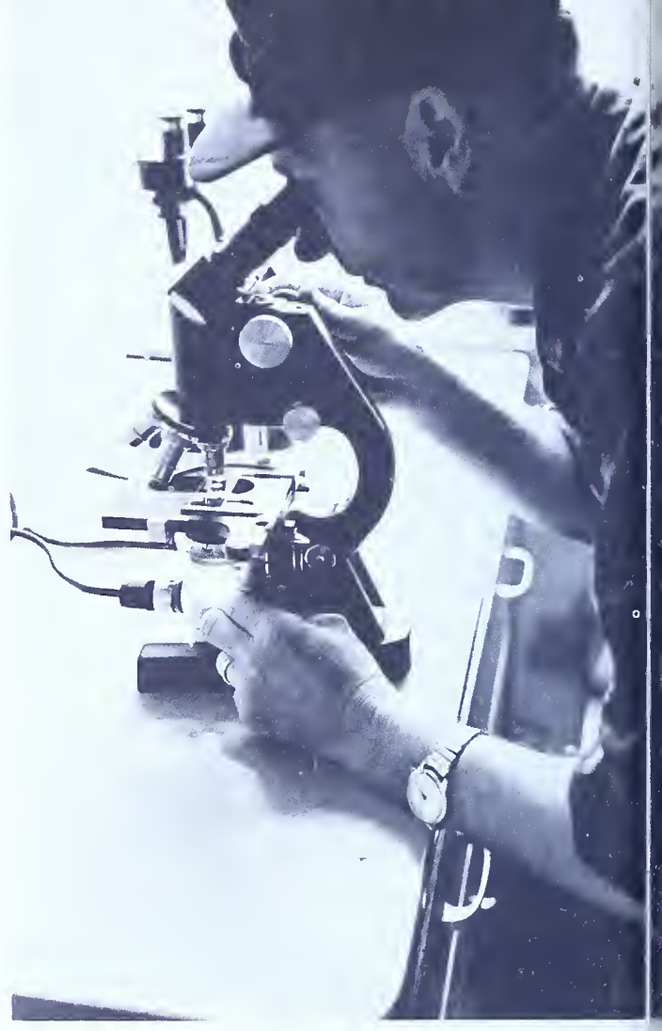
The main problem facing most worm bed owners is where to get the worms to stock and replenish his bed. The easiest and cheapest way is to start in early April, when the nights begin to get warmer and rains have soaked the lawns and hunt for your own. The old adage, "The early bird gets the worm," is true here. Once July rolls around crawlers are really hard to find.

Or you can buy them in bulk lots. By the dozen worms are expensive, but when bought in bulk lots of 500 or 1,000 they can usually be picked up for five or six cents a dozen.

And if you're lucky enough to find some in an amourous mood you might have more on your hands than you know what to do with!

IF YOU'VE EVER WONDERED WHERE ALL THE MUSKELLUNGE PENNSYLVANIA FISHERMEN CATCH COME FROM, THEN HERE'S A STORY YOU'LL WANT TO READ BY A MAN WHO WORKS WITH THESE BIG FISH ALL YEAR LONG.

LOCATED AT THE PENNSYLVANIA FISH COMMISSION'S SMALL BUT EFFECTIVE UNION CITY HATCHERY IT'S A STORY ABOUT . . .



HATCHERY SUPERINTENDENT LeRoy Sorenson use microscope to check sperm before eggs are fertilized.

PENNSYLVANIA'S MUSKIES

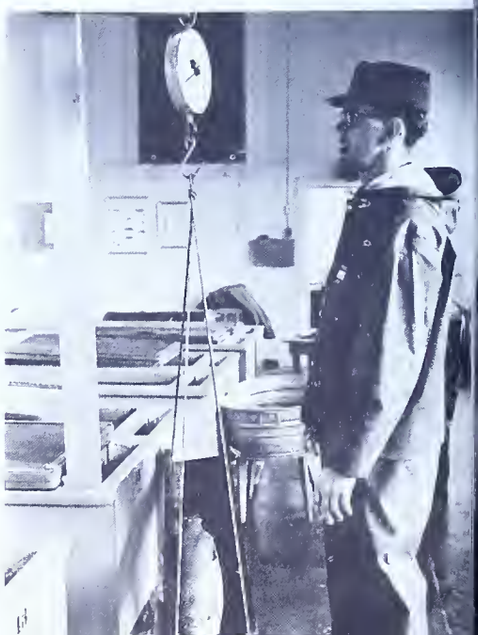
HOW WE GET THEM

by LeRoy Sorenson, Superintendent
UNION CITY & CORRY HATCHERIES

BELOW LEFT Raymond Emerson and Sorenson take smear of sperm from male, one of several muskies anesthetized in large tub. In the center Howard Phelps and Dick Coatoam measure a muskie and record it's length and weight (below right) before eggs are taken.







NETS ARE SET for northern pike as soon as the ice leaves the lake, about March 30 while muskies spawn a little later, but the procedure is the same for both.

Setting nylon trap nets for these big fish is a two or three man job. Usually six or seven nets can be set a day. The trap net has a long lead that runs from the shore out into the lake to the crib or trap itself. During the spawning runs muskies and northerns move into shallow water and travel along the shore line. When they come to the lead of the trap net they try to get around it by working out into the lake—leading them right into the trap! Once they move through the funnel they can't escape.

Traps are checked every day including Saturdays, Sundays and holidays. When the ripe spawners are caught, they are brought to the hatchery for spawning because a better and more thorough job with less injury can be done at the hatchery.

Since these fish are large and are hard to handle they're given an anesthetic. This is easier on the men and the chance of injury to or loss of these big fish is much less—it also permits a better job of egg taking.

A 45 inch muskie usually produces two to three quarts of eggs (55,000 per quart). Six to eight male fish are used to fertilize this number of eggs.

Through research and experimenting for a five-year period, the Pennsylvania Fish Commission has improved these egg-taking techniques which has increased the fertility in eggs from five or ten percent up to 80 or 90 percent.

Nine-hundred thousand to a million northern pike eggs and 700,000 to 800,000 muskellunge eggs are taken each year. Average fingerling production is 60,000 to 70,000 fingerling muskies ranging from four to eight inches long and 4,000 to 10,000 northern pike fingerling ranging from four inches to twelve inches long yearly.

After eggs have hatched, for twelve to fifteen days the eggs lay on the bottom of the tank—they're now called egg sac fry and survive on the yolk sac of the egg. When this has been absorbed, they become free swimmers and then must be fed. This is when the work begins. At this stage they are fed very tiny crustaceans called daphnia. In order to have the right size feed the daphnia has to be sorted through a very fine mesh net. As the fish grow, they are fed larger feed. By feeding feed all the same size, the fish all grow at the same rate—helping to prevent cannibalism. Muskies and northerns are cannibalistic and will readily eat their brothers if they are smaller than themselves.

Muskies are fed daphnia for ten to fifteen days after which they are fed live minnows—four to six a day depending on the size of the available minnows and there must be feed in the tanks or ponds at all times or they start eating each other. A muskie can eat a minnow half his own length.

At the same time from the time the egg is taken until the fingerling is stocked in the fall, the fish must be treated daily for fungus and other parasites.

After the muskie has started to eat minnows, he grows rapidly at the rate of about two inches per month. In order to prevent cannibalism they are sorted several times during the summer. Tanks are cleaned daily and dead minnows and muskies removed and recorded.

In order to keep a comprehensive record of fish stocked in certain lakes, many of the fish are fin pulled or fin clipped. When the muskie is about four inches long his ventral fin can be pulled without injury to the fish. After the fish is five inches long, the fin is clipped off close to the body. When the fin is clipped, it will regenerate but is always deformed. It is a help to researchers when a person catching a muskie with a missing fin or a small fin reports where he caught it and the size of the fish as well as which fin was missing or deformed.

Work at Union City begins early spring. Visitors are always welcome to watch these interesting operations for providing Pennsylvanians with these largest of all Keystone State sportfish.

EMERSON AND SORENSON prepare to take eggs from female by wrapping her in inflatable blanket. Pressure is then used to force the eggs from the big fish.









CRAZY CRAPPIE

by
ALBERT G. SHIMMEL

SPRING HAD SUFFERED A RELAPSE. For a week the temperature had risen above normal. Robins rioted as they saluted the sunrise. The cardinal yelled, "Cheer! Cheer!" from the apple tree on the lawn. Neighbors stored their snow shovels and brought out their lawn rakes, some even changed their winter tires. I saw a man and two boys fugitively poking about the garden plot with a spade and a worm can. Then it began to rain. The rain changed to snow and by morning there was a good four inches of the white stuff. The next morning the temperature had fallen to an uncomfortable five degrees. The sun came out but it made little appreciable difference. The outlook for the week-end was anything but promising.

When Bill, who occupies a desk just across the corridor from mine, suggested a weekend expedition against the crappie, I inquired whether or not he had slipped on the ice and suffered a mild concussion. Surely no one in his position would even hint at fishing when snow patches were abundant and the afternoon temperatures barely climbed above the teens. In my young and callow days I had been tempted abroad when the opening of trout season had been at odds with the weather, but to risk frostbite for a few panfish . . . Unthinkable! Pressing business in a distant city demanded my attention.

Two weeeks later I succumbed. Bill placed a photograph of a fine catch of crappie bedded in a snow bank and a package of fillet on my desk. I rose to the bait like a winter starved trout. Besides the temperature had moderated to freezing.

The public wharf was hidden in a cove on the sunny side of the lake. I turned away in horror. The place resembled a family picnic area. There were people, children and even a dog or two . . . there was confused scurryings . . . shouts and even a portable radio or two to add to the din. Even as I watched a flopping fish was added to a stringer, seconds later a lady at the end of the wharf added another. A small boy yipped as he lifted another on a high arc that landed far back on the beach. This was my introduction to fishing en masse.

Crappie take a wide variety of baits and lures. The taking rig for the day was a white jig with a float attached some three feet above. The retrieve was so slow that for all intents and purposes the jig hung suspended. When the bobber dipped the response must be made quickly but gently. Losses are frequent because of the crappie's tender mouth. I soon learned the reason for the float.

During the winter, brush mats were constructed, wired together and weighted with stones. These were placed on the ice where the water was about four to ten feet deep. When spring came and the weighted mats sank into place, schools of minnows were attracted to them. These in turn concentrated the crappie that moved in from deep water to spawn. The float kept the jig riding just over the brush. It took skillful handling to keep a big crappie from entangling the rig in the brush and escaping.

While the water is cool the larger specimens are caught on the jig. The preferred colors seem to be white or pale yellow with either nylon or maribo skirts. As the water warms they shift to minnows or cut bait. Worms seem to be the poorest producer of all baits. The size of the fish seem to grow smaller as the water rises in temperature. By mid June the spawning is finished and the schools move into deeper water.

Only the confirmed crappie fisherman will spend the time and labor to locate these deep cruising schools. They are quite nomadic and are seldom found in the same location with any degrec of regularity. Occasionally they come to the surface when a hatch of flies is on. If the angler is on hand with a light fly rod and the proper fly the sport

continued on page 26

MODERN CAMPING by DEL & LOIS KERR

EARLY START

PENNSYLVANIA'S STATE PARK Campgrounds will be opening for the 1969 season early next month. Now is the time to be making plans for that first spring trip. Perhaps you would like to visit one of the Commonwealth's largest resort areas before the height of midsummer traffic.

The Pocono Mountains have long been known for their scenic beauty and varied attractions for travelers. Right in the heart of this lush green mountainous country is Promised Land State Park, which hosts the second highest total number of campsites among the state parks at the present time, 316 sites.

It's hard to believe when one views the beauty of this region that the name "Promised Land" was not bestowed for this reason. As a matter of fact, early settlers of the Shaker Sect so named the area facetiously because the wild, rocky country made their dreams of rich farms impossible. They soon moved on to greener pastures.

Promised Land is located in Pike County on Route 390 which bisects the park. It is approximately midway between Canadensis and Hawley.

There are three camping areas providing a total of 316 wooded and lakeside sites. An overflow area accommodates 50 more camping units on holidays and busy weekends. It is normally wise to arrive early Friday for a weekend site.

Many of the campsites are located adjacent to one of the two crystal blue lakes. No sites are further than half a mile away from the shores. Two of the three camping areas have private bathing beaches while the third uses the main bathing area. The Pines camping area is located in a lovely stand of white pines, while the Pickerel Point camping area is located on a peninsula on the main lake.

Construction of modern sanitary facilities began last year and hopefully they should be ready for this season. Ice, gas and groceries may be purchased within a mile. Snacks are available at a concession stand in the picnic area at the main lake.

The larger lake called, appropriately enough, Promised Land Lake covers 426 acres. A sand beach with lifeguard protection is provided for swimmers. There are two boat concessions and four locations where you may launch your boat. Bait is available.

Lower Lake is approximately 200 acres. It has facilities for fishing and boating, but no bathing beach. Both lakes are stocked with a variety of fish including large and small mouth bass, pickerel, walleye and muskie. Perch, sunfish and catfish also offer a challenge to the angler.

Twelve rustic cabins can be reserved in advance for one week periods. Only Pennsylvania residents may reserve during the summer season, but out-of-staters are accepted in spring and fall.

Eight recommended hiking trails have a combined length of 17½ miles. Some are easy but others are not suitable for children. It is requested that hikers follow only specified trails and not attempt shortcuts for much of the area is extremely overgrown.

Two nature trails, with trees identified, are blazed on Pyle Island. One is half a mile, the other circumvents the island and is a mile long. Park personnel can supply literature describing the trails, their length and whether or not they are strenuous.

North of Promised Land State Park is the Bruce Lake Natural Area which is being conserved for present and future citizens of the Commonwealth in its natural state. It consists of 2,300 acres of hardwoods and evergreens. Stumps still can be seen of the virgin hemlock which were lumbered in the last century before state acquisition of the land.

Bruce Lake is a natural 48-acre lake, one of Pennsylvania's few remaining glacier-created water areas. On the shores are spruce and tamarack trees. The bog contains cranberries and pitcher plants. Waterfowl abound as well as several species of fish.

The lake can be reached only on foot over Bruce Lake Road from Rt. 309 which is three miles, or by Bruce Lake Trail which is four and one-half miles from Promised Land Lake. Another impoundment, Egypt Meadow Lake, is nearby. This one is artificial.

A wide variety of flora and fauna are native to the area. Campers who wish to backpack into Bruce Lake Natural Area may obtain 48-hour permits from the Promised Land State Park Office. Fishing and hunting are permitted in season.

There are so many tourist attractions in the Pocono region that it is impossible to attempt to list them all. A few of the highlights are any of the tumbling waterfalls—Bushkill, Dingman, Paradise and Winona for example. At Canadensis we enjoyed browsing through the candle shop with the widest variety of decorative candles we've seen anywhere.

You might enjoy watching pottery being made at a factory in La-Anna. Memoryland, U.S.A. at Mt. Pocono brings back nostalgic recollections of days gone by with their country emporium and hex shop. Children will enjoy the Storybook Land at Moon Valley, Milford, and the Wild Animal Farm at Stroudsburg, Pa. For information on these and other attractions in the area contact the Pocono Mountains Vacation Bureau, 1004 W. Main Street, Stroudsburg, Pennsylvania.

THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

CANOE COMEBACK

MAKING A STRONG COMEBACK, at a time when engineers are dreaming of new hull designs or increasing the horsepower in a more compact engine, is the canoe.

As a representative for one major canoe manufacturing firm put it, "the overall canoe market in the past ten years has more than doubled."

Also questioned about the increase of interest in canoeing the spokesman for a western Pennsylvania ageney which distributes canoeing guides replied, "we could have distributed three to five times as many guides during the past year with some publicity."

Actually the canoe never left the seene, it merely became absorbed in the overall boating activity and the mere sight of one of these long, slender craft gliding silently along, especially in areas nearly congested with outboard craft, has been something of an oddity.

Twenty to 30 years ago local boat liveries, which supplied rowboats and canoes, were sometimes "sold out" on pleasant weekends and it became almost necessary to reserve a craft several days in advance.

Then came new advances in the boating industry, particularly in the outboard field, followed by the time payment plan and many boating enthusiasts went all out in favor of power.

However, in recent years, an emphasis has returned to canoeing—perhaps the establishment of small lakes where outboards are prohibited was responsible to a certain degree—especially by those outdoorsmen seeking more fun, relaxation and adventure.

Ever try to explore an old, unused canal; or run up a slow moving, tree lined stream in an outboard? How about portaging an outboard around a rapids or dam?

Because of the lightweight design of his craft the canoeist has an advantage over his fellow boat owner. He can car top it practically 12 months out of the year and every lake, stream or river he comes across during his travels can be explored almost immediately if time permits. It's not necessary to wait until next weekend to trailer in the runabout.

Perhaps one of the primary reasons for the increase of interest in canoeing is the use of fiberglass and aluminum, both practically maintenance free, for construction. While canvas covered models aren't out of style, a survey made about two years ago indicates aluminum is the favorite.



TYPICAL WHITE WATER—Marion and Hans Beuhler of the Buck Ridge Ski Club run the Lehigh River. (photo by John Sweet)

Aluminum is, by far, the lightest in weight. The range of models offered by one firm starts out at 44 pounds for a 13 foot double end model up to 117 pounds for a king size, 20 footer.

E. J. Nelson, general sales manager for one canoe manufacturer, reporting on an increase of sales over the past ten years, added, "we believe there are many reasons for this. First, of course, is the total population growth, the portability and versatility of the canoe in the sense it can be used in almost any type of water and paddled, poled, towed and sailed, as well as powered by a small outboard.

"This versatility, combined with a relative low cost in our affluent society, makes the investment in a life-time watercraft come out at pennies per hour for a most healthful recreation," he added.

"Further growth," Nelson noted, "has resulted from the formation of many canoe clubs and organizations that sponsor weekend trips on various streams and rivers; the sponsoring of races by Junior Chambers of Commeree and other groups to promote local resort and canoeing areas. Also the overall conservation and eleanup effort—government-sponsored and otherwise—of our streams has made canoeing possible in many areas where it was not previously a very pleasant experience."

This growth is not limited to any particular section of Pennsylvania but is becoming quite widespread.

In the Pittsburgh area, Bruce E. Sundquist, of American

continued on page 27

PFC ON THE MOVE —

Probably One Of The Biggest Attractions In The Outdoor World During The Month Of March And Early April Is The Annual Pre-season Stocking Of Pennsylvania's Many Trout Streams. And Now Is The Time When . . .



WATERWAYS PATROLMAN Raymond Hoover of Tioga County releases a netfull of nice trout during last year's pre-season stocking.

STOCKING STARTS

NEXT PAGE

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STOCKING STARTS—



A PAIR OF SPORTSMEN begin a downstream trek as they float stock one of Lancaster County's numerous trout streams. Many clubs throughout the state stock this way to achieve better distribution over the course of a stream which may wind far from places where the "trout trucks" can go. Below Budd Brooks, the Commission's stocking manager and secretary Marguerite Davidson go over stocking records in planning for another season.



PROBABLY SOME OF THE MOST EXCITING DAYS in any angler's life each spring are those times he joins the group stocking trout in some favorite stream. A feeling of accomplishment as well as the knowledge there'll be a challenge awaiting him on that opening day in mid April, combined with the enjoyment of being outside in early spring can give a real lift to spirits starting to sag after a lengthy season of sleet and snow.

Each year hundreds of thousands of trout are raised in Pennsylvania Fish Commission hatcheries for release prior to the annual opener—this year April 12.

During 1969 Keystone State sportsmen and Commission employees will turn over two million trout loose in Pennsylvania's hundreds of miles and acres of streams and lakes.

According to Budd R. Brooks, the Commission's fish stocking manager, approximately 540,000 brook trout, 740,000 brown trout, and 579,000 rainbow trout will be stocked pre-season. The numbers in-



ATCHERYMEN LOAD Commission trucks ear-
er mornings so trout can be transported to
istant counties.



S THE STOCKING gets underway sportsmen
llow the truck from stop to stop to help carry
out up and down banks and across fields to
reams.

by **TOM EGGLER, editor**

Pennsylvania Angler

MARCH—1969



COOPERATIVE NURSERY CLUBS, like members of the Potter County Anglers shown here, go to work weekends to gather fish which they have reared for stocking in public waters.

clude fish raised under a cooperative program with the Department of the Interior's Bureau of Sports Fisheries. Estimated total is 1,879,-000.

In addition many sportsmen's clubs which rear trout under the Commission's Cooperative Nursery Program will also be releasing large numbers of fish. Program coordinator Robert H. Brown says the clubs will be releasing "in the neighborhood of a quarter million" trout before the coming April opener.

Stocking trucks will begin rolling as soon as conditions are favorable. According to Brooks a total of 23,337 acres of water will be stocked pre-season this spring. That includes 4,940 acres of lakes and an additional 18,397 acres of stream. The streams add up to nearly 5,000 miles—4,793, says Brooks. However he pointed out that the figures were tentative and could change before actual stocking starts.

First stockings will probably be made in southern tier counties where water and weather conditions are generally favorable earlier than in the mountain counties where late melting snows and runoff often make access to streams and lakes difficult. Additional stockings will then be made once the season has opened.

Sportsmen interested in joining the stocking groups should keep an eye on their local newspapers for stocking places and dates. Many radio stations also carry reports of the coming stockings.

AND WHEN THE GOING GETS ROUGH a heavily loaded transportation truck may need a hand from club members helping with the stocking. (photo by the Potter Enterprise)



Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



NO CARES!

■ A local duck hunter told me that on the first day of duck season in the Owls Nest area, with all the shooting going on, a lone fisherman sat in the midst of the bombardment seemingly completely unconcerned.—***Waterways Patrolman BERNARD D. AMBROSE*** (Elk County).

LOST TACKLE FOUND

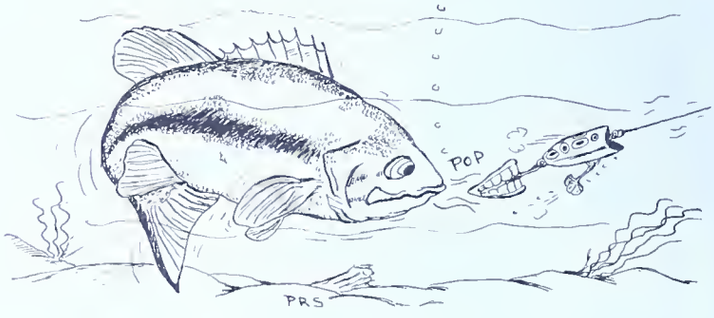
■ A sportsman from Monroe County—John Riley—had bought a new rod and reel and of course was anxious to try it out, as it had been something he'd wanted all his life. He loaded his boat and gear and headed for Brady's Lake taking his son. They started fishing and about the first cast the teenage son made, he hooked his father's rod and cast it right into the lake. Several hours were spent trying to retrieve the tackle, but to no avail. Several days later John went back to try and retrieve the tackle again. After some six hours dragging, he finally hooked the tackle. His son has returned home again!—***Waterways Patrolman WALTER J. BURKHART*** (Monroe County).

"THANK YOU" CO-OPS!

■ During November I helped the Hillside Sportsmen's Club stock about 2000 two-year-old trout raised at their cooperative nursery. These fish will surely help fishing in that area. The Morris Sportsmen Club also has a cooperative nursery and they stocked a number of two-year-old fish in the vicinity of Morris. The Potter County Anglers Club also stocked fish from their cooperative nursery, with many sizable fish sent to Beechwood Lake in Tioga County for the winter fishing season. Sportsmen's clubs which participate in the cooperative nursery program certainly deserve a big "thank you" from all the fishermen of the state for the contribution of time, labor, and finances used in rearing trout and stocking them in waters open to public fishing!—***Waterways Patrolman RAYMOND HOOVER*** (Tioga County).

"FIXED" TICKET

■ While on patrol at Keystone Lake during November, I watched a man and woman fishing. They weren't hard to observe, as they were the only ones on the lake but, lo and behold when I checked them, neither had a license. After the usual explanations, they decided to settle on field receipts. When they appeared to settle their fines, I told them I would file a technical report against the lady with no fine involved. The man then spoke up and told me of all the influential people he knew and said he wanted to have the fine "fixed" and asked who he had to see. I quickly pointed out he could get it "fixed" right here for just the $25.00 fine.—***Waterways Patrolman ARTHUR A. HERMAN*** (Westmoreland County).



PROTECTED PLUG—

■ Seems Bob Shook was fishing Duman Dam recently and not doing so well with the particular plug he was using. He reeled in the line, and put on a new plug. On the first cast, a nice bass hit, but Mr. Shook didn't hook it. As he was about to make the second cast, his partner remarked that it was a rather strange looking plug. Mr. Shook looked at the plug, then rather sheepishly removed the plastic hook guard.—***Waterways Partolman ANTHONY MURAWSKI*** (Cambria County).

NEVER AGAIN!

■ Recently Special Fish Wardens Dennis and Barto were wiling away some hours at Falmouth Access Area fishing when Mr. Dennis suddenly hooked a very large musky. Bringing it to the boat he and Mr. Barto found their net wasn't large enough to land the monster so the call went out for help. Lo and behold along came a "Good Samaritan" who quickly loaned them his net. The fish was netted, measured and returned to the water. The last they saw of the "Good Samaritan," (after thanking him for the use of his net) was as he stumbled toward his auto, mumbling about never again loaning his net to two numbskulls who would release a 38 inch muskie!—***Waterways Patrolman SAMUEL W. HALL*** (Lancaster-Lebanon Counties).



PART III—CONCLUSION

FISHING IN PENNSYLVANIA

by JAMES T. VALENTINE
art by Chuck Ripper

WALLEYE

The walleye, an old native of Pennsylvania, is found in many of the waters of the Commonwealth. This species inhabits many of the rivers, large streams, and impoundments, and is available in great numbers. The walleye, however, is perhaps one of the most underharvested of all game fish. This fish, at times, can be most difficult, if not impossible, for the inexperienced angler to catch. This is true for several reasons, the most important being that the walleye is primarily a nocturnal feeder, meaning that the feeds mostly at night. He can, however, be caught during the day provided you understand his habits and can learn how to locate him.

Being a school fish by nature, scores of walleye will congregate in the depest waters during the daylight hours. Late in the evening and throughout the night, they will move into the shallow water to feed. To catch them during the day, you must learn to fish your bait or lure very deep. Whether you troll, cast, or still-fish, get your bait or lure right on or very near the bottom. When walleye are in the shallow water they can be taken at various depths. They have been known to be taken on surface lures.

Walleye are very active immediately after their spawning season. Pymatuning Lake has been the classic ex-

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FISHING IN PENNSYLVANIA

ample of a walleye fishery that has produced literally tons of walleye during the month of May. During the hot summer months, walleye fishing usually slows down unless you pursue this fish very late in the evening and throughout the night.

When the frosty weather sets in and the leaves start to turn, walleye fishing begins to increase and seems to get better as the year progresses. This is the season when the real lunker walleye are most frequently caught.

The average walleye will run two or three pounds, but late autumn and winter fishing will produce fish eight pounds or more. The upper Allegheny River is one of the most outstanding walleye hot spots during the winter months for open water fishing. Many of the numerous lakes in northeastern Pennsylvania produce good catches of walleye during the winter months to those who prefer to fish through the ice.

Equipment for walleye fishing is generally the same as that used for bass. A medium action spinning or spin-casting outfit does a good job. Eight or ten pound test monofilament is needed if you are in good walleye water and can expect to land a big one.

Artificial lures and plugs for walleye are generally those that run deep or actually move along the bottom. Some of the jointed plugs that wiggle work best, provided they run deep. Lead headed jigs, originally designed for salt water fishing, have proved to be an outstanding walleye lure. Jigs are simply a hook with a molded lead head and some sort of hair, feathers, or nylon used as the tail—bucktail is probably the most popular. The usual method of fishing jigs is to cast out, let the jig sink to the bottom, and retrieve slowly, allowing the jig to bump along the bottom. White or yellow bucktail jigs have put a lot of fish on the stringer. Try them!

Live bait fishing for walleye will catch the big ones. A creek chub or sucker five or six inches in length is an excellent live bait. Fishermen who like to troll still find the June bug spinner-night crawler combination hard to beat.

The walleye can be an exciting fish to catch. They are plentiful but can be difficult unless you learn their habits. If you master walleye fishing you will be doubly rewarded for they are not only a large sporty game fish but are also considered by many the most tasty of all fresh water fish.

NORTHERN PIKE

The northern pike is considered to be one of the most vicious of all of our fresh water game fishes. They consistently wear a sneer on their elongated snouts and are as mean as they look. The northern, however, is a terrific game fish and can provide a real trophy for the fisherman who can develop the skill necessary to catch him.

Many of the waters of northwestern Pennsylvania have had a native population of northern pike for many years. More recently, with successful hatchery propagation, they have been planted in many of the other waters throughout the Commonwealth. Glendale Lake, Meadowgrounds Lake, Dinehot State Park Lake, and Presque Isle Bay are but a few of the excellent northern pike hot spots.

Very early in the spring, when the ice begins to break up, northern pike gather in the weedy backwater areas to spawn. After spawning, during the early part of the season, northern pike fishing is excellent. At this time they will strike a variety of artificial lures and live bait. Perhaps the most productive of all artificial lures for northerns is the red and white spoon. This old standby has accounted for an unbelievable number of these fish.

They can also be taken on some of the larger spinners, silver or gold, and a variety of underwater plugs and lures provided they have good action and are flashy. A short wire leader six or eight inches in length is recommended, the sharp needle-like teeth of the northern can quickly cut a line regardless of its strength.

Being a fish eater by nature, northern pike are quick to strike a chub or shiner that is caught off guard. For this reason live bait fishing for northerns has always been one of the best ways to catch them.

Generally, live bait five or six inches in length, is hooked slightly below the dorsal fin, and a float is attached about three feet up the line. This method allows the injured bait to swim in a natural manner and keeps it from getting down into the weeds. Again, a wire leader is recommended to prevent the teeth of the northern from cutting the line. When a strike occurs remember to give the fish plenty of time to swallow the bait for the northern, like all members of the pike family, seem to get some sort of pleasure out of slowly killing the bait before they eat it.

Equipment for northern pike fishing should be a bit heavier than that used for bass, walleye, etc. A stiff action spinning or spin-casting outfit can be used and an eight or ten pound test line is recommended. Northern pike run big and it is common to catch them in the eight to ten pound class. Some fishermen even prefer a bait-casting outfit equipped with fifteen or twenty pound test line.

The northern feeds actively during the winter months, and fishing for them through the ice can be very exciting. Tip-ups are used and a fairly heavy line with a wire leader is suggested. Bait your hook in the same manner, through the dorsal fin, and fish your bait several feet off the bottom. This method has accounted for many northerns.

MUSKELLUNGE

The success of muskellunge fishing in Pennsylvania is a story that will be retold for many years to come. Originally confined to the extreme northwestern corner of the state, new propagation methods developed by the research and hatchery personnel of the Pennsylvania Fish Commission, have extended the musky's range throughout the entire Commonwealth.

An outstanding example is the Susquehanna River and its tributaries. The musky, not native to these waters, was introduced in recent years and hundreds of muskies from barely legal size to thirty pound trophies are now caught in these new areas each year.

There is little doubt the muskellunge is the most difficult of all fresh water game fish to catch. This is true for several reasons, the most important being that he is a moody fish and will go for long periods of time without accepting



food of any kind. When he does go on a feeding spree, he will hunt, catch, and eat another fish that may weigh up to several pounds. And this will last him for a long period until he feeds again.

Muskies have been caught many ways by many fishermen using all sorts of fishing equipment—they have also been lost by many fishermen using all sorts of fishing equipment! There is no question that a goodsized musky can be landed on light spinning equipment, and there is no question that *many more will be lost* than will be landed. It is, therefore, importan to remember that to *consistently* catch muskies you must fish *for* muskies and you must use equipment designed *for* muskies!

There are basically three methods of fishing for muskies: trolling, casting, and using live bait. Trolling has probably accounted for more muskies than any of the other ways for two reasons: You can cover much more water and it's the easy way to do it. To troll for muskies you attach some sort of musky lure or plug to the end of your line and operate your motor boat around the body of water you are fishing. There are all sorts of tricks and secrets to being a successful troller. This comes with experience and many of the more successful trollers keep the tricks they have learned a deep dark secret.

The second method of catching muskies is to cast for them. The use of a stiff heavy action rod equipped with a good bait-casting reel is recommended. Twenty or twenty-five pound test braided nylon line is used with a wire leader attached to the end. Casting for muskies is usually most productive when you fish the weed beds, bars, and shorelines, for this is where muskellunge lurk. In rivers and streams they can be found in the deeper holes and eddies.

Live bait fishing for muskies is most productive during the months of October and November. You can still-fish or use a rowboat to very slowly troll your live bait. The most popular type of bait for muskies is a sucker ten or twelve inches long. This may seem like big bait but muskies are big fish with appetites to match. When a musky strikes a live bait, be sure to give him plenty of time to swallow it. It may take as long as forty-five minutes to an hour for a musky to completely swallow a twelve inch sucker.

As we mentioned before, heavy equipment is necessary to consistently land muskies. Many musky fishermen use light salt water rods and reels and find them ideal when fighting a musky twenty-five or thirty pounds. Many types of plugs and lures are designed especially for musky fishing. Most of them are big! Large jointed underwater plugs, spinner-bucktail combinations, and surface plugs that cause a great commotion will all take muskies. Large jigs are used to harvest hundreds of muskies each year at the Falmouth area on the Susquehanna River.

To summarize musky fishing we can offer a bit of advice. Use heavy equipment, very large plugs or lures, jumbo size live bait, and plan to spend hours and hours before you are successful. This is musky fishing! You may go out and accidentally catch a good sized musky on your light spinning equipment but this rarely happens. Remember that we said to *consistently* catch muskies, you must fish *for* muskies. This is, without a doubt, a very specialized type of fishing requiring special equipment, experience, patience and know-how.



CATFISH, CARP, SUCKERS, BULLHEADS

We have discussed several of the many species of pan fish and game fish found in Pennsylvania waters. There is still another group of fish that are the favorite with many anglers and are abundant throughout the Commonwealth. We are speakng of the sucker, carp, and members of the catfish family.

SUCKERS

After a long cold winter a fisherman is anxious to get outdoors and go fishing. Most generally the sucker will provide him with the action he has been waiting for. Early

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FISHING IN PENNSYLVANIA

in March, when the ice is breaking up on the larger rivers and impoundments, suckers begin their annual spawning run up the smaller tributary streams. This is when the serious sucker fisherman packs up his rods, related fishing equipment and heads for the nearest sucker hole.

The choice of tackle depends on the individual fisherman. Any of the spinning, spin-casting, or bait-casting outfits will do the job. A six pound test monofilament line on the spinning or spin-casting outfit or a fifteen pound test line on the casting outfit should be sufficient.

Terminal gear for suckers is a bit more critical. A small hook, usually size eight, is about right for hooking the sucker. If you look closely at the construction of the mouth of this fish you will see that it is farily small, designed strictly for bottom feeding. This should tip you off that when fishing for suckers, keep your bait on or very near the bottom.

During the late winter and early spring months rains and melting snow will cause high fast water so plenty of weight must be used in order to keep the bait down on the bottom.

Most expert sucker fishermen will agree that small red garden worms make excellent sucker bait. Night crawlers can also be used quite effectively. A tightly stretched line is recommended so you can tell the gentle pull of the sucker's bite. Experience will tell you when to set the hook and after you get the knack you'll agree that early spring sucker fishing is exciting.

CARP

Every fisherman dreams of catching a large fish that will put up a tremendous battle and there is no question the carp can provide this type of action. Carp are found in all of the major watersheds and many of the lakes and impoundments throughout the state. They are a prolific species, very strong and hearty, and can tolerate many different kinds of water, therefore they are quite abundant.

To catch carp, however, is not as simple as it may seem for they are one of the most intelligent of all the fishes. Use too heavy a sinker, too large a hook, or let a carp know you are on the other end of the line, chances are you'll never catch him.

Carp are bottom feeders by nature and will eat many different forms of plant and animal life. It has been said that carp will eat almost anything. The preferred baits for carp fishing seems to be dough balls or corn. Some fishermen use worms or soft shelled crabs and are successful. Night fishing is one of the most productive times to land big carp.

Spinning or spin-casting outfits with eight or ten pound test line or bait casting outfits with fifteen or twenty pound test line are most popular for carp fishing. A small hook, size six or eight, is about right when using dough balls or corn for bait.

The real secret to catching or not catching carp seems to lie in the sinker. The rule is to use more weight than you need to keep your bait down on the bottom and motionless. In still water, a very small split shot is more than enough. Moving water may require a bit more weight. This is very important since a carp, when mouthing the bait, can feel the weight of the sinker which may cause him to drop the bait. When a carp does decide to take your bait he will generally swallow it immediately and swim off. Set the hook quickly and get ready for a battle lasting fifteen minutes or more. For a real tussle with a strong heavyweight—try carp fishing!

BULLHEADS—CATFISH

The members of the catfish family have always been very popular with fishermen. From the smaller bullheads to the giant channel cats, it is generally agreed that these are among the finest eating fish. A great many of the lakes, dams, rivers, and streams throughout the Commonwealth are populated with members of the catfish family.

Bullheads are almost exclusively bottom feeders and will eat a variety of plant and animal life. Choice baits for bullheads are worms, night crawlers, minnows, and soft shelled crabs. Bullheads are slow moving fish and slow moving or motionless baits seem to work best.

Channel cats, the big brothers of the bullhead, can be taken on minnows, crabs, night crawlers, liver, and will often strike a bass plug or spoon when moved slowly near the bottom. These large catfish may weigh twenty pounds or more. Expect a real battle if you're lucky enough to hook onto a big one.

Equipment for the catfishes is very similar to that used for carp. A larger hook should be used, size one or two because catfish have very large mouths. The sinker or weight should be heavy enough to keep the bait on the bottom. Fish late in the evening and throughout the night for the best action. After a rain, when the water begins to rise and get cloudy, catfish go on a feeding spree. This is when fishing for catfish is at its best.

MISCELLANEOUS

WEATHER CONDITIONS AND FISHING

Much has been written and discussed about various weather conditions having a particular effect on fishing. Such things as a falling barometer, high pressure area, brightness and position of the moon, have all been accused of regulating the feeding habits and activities of fish. There are some combinations of wind, weather and moon conditions that does play an important part in the activities of fish but we are not certain what these combinations are.

Many theories are often speculation on the part of individual fishermen. We hope the time never comes when we can predict, with certainty, that the fish will either bite or not bite. The most interesting aspect of fishing is the anticipation and suspense involved. To know for certain



that you would catch fish without fail would soon make fishing routine and monotonous. When you get the urge to go fishing—go fishing!

EQUIPMENT

HOOKS

When all is said that can be said about rods, reels, lines, etc., the hook may prove to be the most important part of your entire equipment.

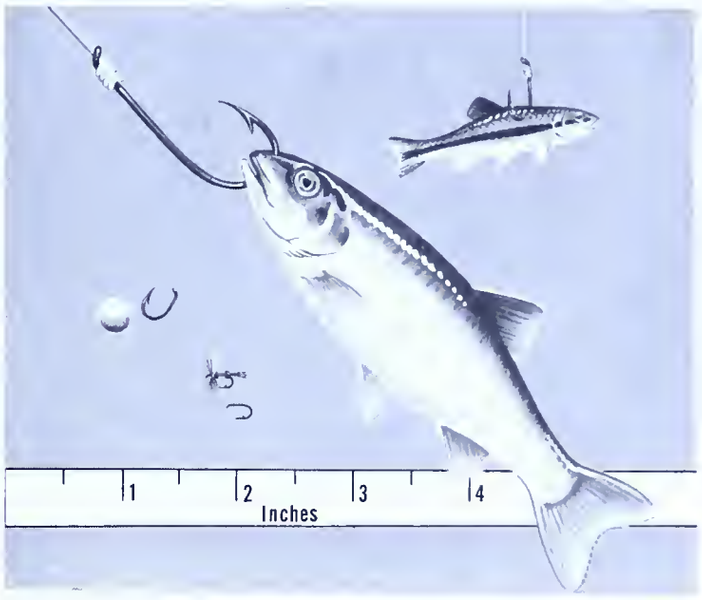
Get in the habit of using sharp hooks. Buy good quality hooks and use a hone to keep a needle like point on them. Hooks come in different sizes, the larger the number, the smaller the hook. Use the proper size hook for the bait you are using and the type of fish you expect to catch. A size eight hook baited with a one inch minnow may be just right for crappie fishing. You would need a size one or two hook for the four inch chub you are using for bass. We repeat—use the proper hook!

SINKERS

Sinkers come in a variety of sizes, shapes, and weights. Again you must learn to use the proper size and weight sinker for the particular situation. In order to get a soft shelled crab down on the bottom where the smallmouth bass are feeding you may need a clamp-on sinker weighing ⅛ ounce. On a slow moving trout stream, a very small split shot could provide enough weight to get your salmon egg down to the trout. Most novice fishermen use too much weight!

BOBBERS AND FLOATS

Size is important when using a float or bobber. Choose the bobber with relation to the type of fish you expect to catch and the type of bait you are using. A very small bobber, less than an inch in diameter, would be large enough when using worms for bait and fishing for bluegills. A bobber two inches in diameter may be needed to hold up the six inch chub you are using for northrn pike bait.



SUMMARY

The material presented here is far from complete. Certainly there is more that could have been included about the equipment used in fishing. The information covering the various species could have been broadened to include many of the other pan fish and game fish found in Pennsylvania. We have merely tried to touch on the basics of fishing necessary to help the novice fisherman get started.

Fishing can be made as simple or as complicated as vigorous or as passive physically as the individual chooses. The important thing to remember is that fishing in this day and age is strictly for sport. We no longer need to rely on catching fish to feed our families.

Fishing is fun! It is entertaining, relaxing, and healthful. It's a personal challenge to the outdoorsman who feels a need to compete with nature and it does wonders to provide relief for the businessman's tensions. It keeps older folks occupied in their later years after retirement, and it prevents younger boys from getting into trouble. Boys seldom think about stealing hub caps when they're outdoors trying to outwit an eighteen inch brown trout. Fishing is a great deal of fun so our last recommendation to the beginner is to go fishing, and—*catch fish!*

BOOKLET TO BE AVAILABLE—

Plans are currently being made to publish this series "Fishing In Pennsylvania" in booklet form. The series began with the January issue of the Angler and concludes with this issue.

Angler readers interested in receiving a copy may do so by writing:

Conservation, Education and Training Division, Pennsylvania Fish Commission, Box 1673, Harrisburg, Pennsylvania 17120



COMPLETED midge pupa.

FLY TYING FEATURE

/by Chauncy K. Lively

TYING A MIDGE PUPA

THE ORDER DIPTERA is by far the largest of the insect orders of importance to fly fishermen. Included are house-flies, mosquitoes, crane flies, gnats and midges, to mention a few, and it is a group of insects neglected by many fly-tyers. The midges of the genus Chironomus are plentiful on most of our trout streams and trout feed on them just about year-round. The Chironomids are small and mosquito-like in appearance and a few species, like the pestiferous punkies, can make life miserable for the angler who neglects to carry a good insect repellent.

Because of their small size and the difficulty of seeing them on the water, midges are often called "no-see-ums." The furious activity of trout feeding on something unseen is a source of frustration to the uninitiated; yet, solving the mystery of midging fish unlocks one of the great secrets of fly fishing.

Midges undergo a complete metamorphosis, which is another way of saying there are four stages in their life cycle: egg, larva, pupa and adult. The larva is wormlike in appearance and is found in just about any water that is biologically suitable. Every farm boy has observed tiny "blood worms" scurrying about in the rain barrel or watering trough. Eventually, when the larva has achieved maximum growth, it transforms into a pupa with a thick thorax and wing stubs lying close along the sides, all contained within a pupal skin. When the adult fly is ready to emerge from the pupal case the pupa rises to the surface and hangs suspended in the surface film for some time. Eventually the pupal skin splits open and the winged insect emerges into the air and flies away.

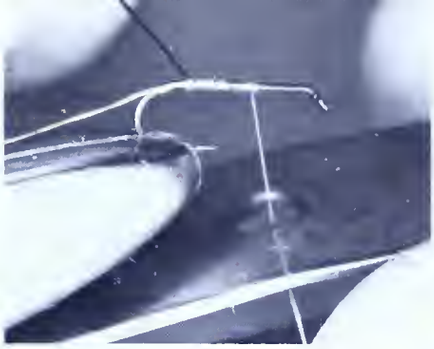
Trout feed freely on midges in the three latter stages of the insect's life cycle but it is the pupal stage which seems to be the most confounding to the beginning fly fisher. When midge pupae are suspended vertically from the surface film trout take them with the same kind of gentle rise that identifies their feeding to the winged fly *on* the surface. Yet the pupa-minded trout will generally not give a second glance at a midge dry riding top-side. Needed is a distinct pupal imitation, neither dry nor wholly wet, a pattern that fishes where trout are looking for the natural.

The midge pupa pattern described here is effective in sizes #18 and #20 and has been responsible for some surprisingly large brown trout. The fly's thorax, made of deer hair folded and bound, gives the pattern enough buoyancy to hold it in or near the surface film without sinking. Midging trout may be found in many types of water but it is in the flat, deep stretches that the pupal imitation seems to work best. A long, fine leader should be used, tapered to 6x or 7x, and it's a good idea to grease the entire leader with line dressing to keep the whole assembly at the surface. A sinking leader will pull the fly too deep. Too, the floating leader helps to follow the path of the fly.

The midge pupa is generally fished up and across stream, just like a dry fly, but occasionally fishing it across and down works well, too. Since the naturals are often active,



ONE



TWO



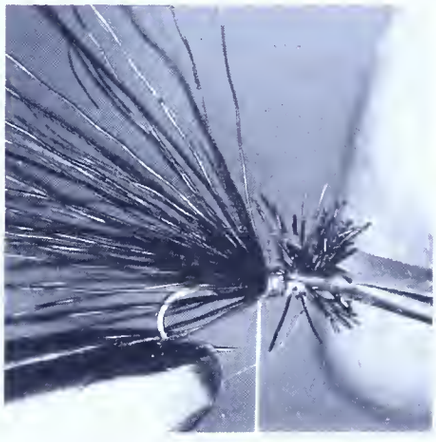
THREE



FOUR



FIVE



SIX



SEVEN



EIGHT



NINE



TEN

TYING A MIDGE PUPA

moving the fly with subtle pulls is in order, particularly in very slow water.

There are several hundred species of the Chironomids and a pupal imitation of almost any color will do at some time or another. However, in addition to the dark pupa shown here, patterns each of reddish-brown, olive and yellow will give you a well rounded set. In each of these patterns the abdomen and thorax should correspond to the base color, while the ribbing may be of any contrasting color. The wing stubs for all should be dun gray as in the dark pupa shown in the photo-illustrations.

Midge fishing, both to the winged fly and the pupa, is a refinement considered by many to be the ultimate in fly fishing. But the presence of midges in a stream can sound a warning note, too, if other flies are not to be found. Midge larvae can withstand lower oxygen levels than other aquatic insects. Consequently, where midges are found to the exclusion of other insectivora it is often an indicator that the water quality is not as it should be.

Steps To Tie A Midge Pupa—

STEP ONE.—Clamp a size #18 hook in the vise and tie in brown nymph thread just ahead of bend. Free end of thread should be left long and attached to thread clip on vise. Allow spool end of thread to hang, as shown. Don't cut off free end of thread as this will be used as ribbing material.

STEP TWO.—For body material tie in a 5" length of fine black floss (or black Nymo thread) over initial tie-in and spiral spool end of thread forward ⅔ length of hook shank. Half-hitch.

STEP THREE.—Wind body material forward, overlapping enough to build a slim but tapered body. Tie off floss in front of body with two turns of thread and trim off excess.

STEP FOUR.—Remove free end of thread from clip and wind as ribbing over body in spaced winds. Ribbing should be spiraled in opposite direction from that of body winding. Tie off ribbing and trim excess.

STEP FIVE.—Cut a bundle of black-dyed deer body hair, about the thickness of a kitchen match, from the hide. Position the butts of hair just forward of hook eye and bind hair to hook behind eye with two tight turns of thread.

STEP SIX.—Hold hair close to hook with left hand and spiral thread firmly over hair toward hook bend about ⅛". Half-hitch. Trim away butts of hair.

STEP SEVEN.—With right hand fold hair forward and with left hand bind hair with three spaced turns of thread, ending behind eye. Half-hitch.

STEP EIGHT.—Secure thread in thread clip and arrange ends of hair radially around hook, like dry fly hackle. Trim ends of hair uniformly to a short stubble.

STEP NINE.—For wing stubs select two dun-colored strands from the base of a black ostrich plume. Tie in wings along sides of deer hair thorax. Wings should be slightly longer than thorax. Do not trim off excess ostrich strand.

STEP TEN.—Attach hackle pliers to butt end of one ostrich strand and wind as hackle behind and through hair stubble. Tie off behind eye. Repeat with other ostrich strand. Trim away excess herl, whip finish head and apply a drop of lacquer to head. COMPLETED midge pupa on page 24

HEADS NEW DIVISION—



The Pennsylvania Fish Commission has named Willard T. Johns of Hershey to head a new Division of Conservation Education and Training as part of an increased effort to coordinate expanding conservation and education programs.

Johns comes to the Commission from a post on the conservation education staff of the National Wildlife Federation in Washington where he has served for the past four years. Previously he was employed by the Pennsylvania Game Commission in its public information office where he became well known to many Pennsylvanians as editor of that agency's monthly publication, Pennsylvania Game News.

A graduate of the University of Maine, he is a charter member and past president of the Pennsylvania Outdoor Writers Association as well as a member of the Outdoor Writers Association of America and numerous other conservation and civic organizations.

"PROVIDE HABITAT" IS THEME FOR NATIONAL WILDLIFE WEEK

THE URGENT NEED for the protection and development of wildlife habitat will be the theme for the 1969 observance of National Wildlife Week, scheduled March 16-22. The National Wildlife Federation, sponsor of the observance in association with its affiliates in 49 states, has selected this slogan to remind Americans of the need for conservation: "Provide Habitat—Places Where Wildlife Live."

Thomas L. Kimball, executive director of the Federation, said that the "Provide Habitat" theme was selected because of the constantly mounting threat to natural areas in all parts of the nation. Traditional wildlife areas are being damaged or destroyed through building expansion, water and air pollution, highway construction, and even modern agricultural practices.

"The presence of wildlife is one of the indicators of the quality of our environment," Kimball went on to say. "In areas where the natural landscape has not been damaged, animal populations have an opportunity to survive. However, where the land has been misused, wildlife probably cannot exist. If we can afford progress of this type, we can also afford some protection for our great wildlife heritage."

The Wildlife Week observance has been sponsored annually since 1938, when the event was launched by a proclamation by President Franklin D. Roosevelt. It is scheduled each year to include the first day of spring and promotes a timely conservation issue or resources problem.

The National Wildlife Federation and its affiliates direct the observance in cooperation with citizen groups, public officials, youth organizations, public agencies, and the nationwide press and radio-TV media.

continued from page 12

CRAZY CRAPPIE

is fast and furious. Some experts cruise the lake at evening, alert for the sign of a school that is surface feeding. I once located a school that were feeding on a yellow fly. After trying several patterns with little success I paused to eat a banana left over from lunch. Its color seemed to be a fair match for the flies so I cut thin strips of the skin and used it for a lure. By the time the hatch was over more that a dozen large crappie graced the stringer.

One evening, many years ago I was fishing for trout in a stream, that flowed from a lake. The warm water of the lake was chilled by the sand springs and made it ideal for dry fly fishing. At dusk, while fishing a deep slow pool with a Furnace Bi-visible it suddenly was sucked under the surface. I set the hook and from the weight, judged that I had hooked one of the old browns that frequented the stream. Imagine my surprise when after one short power run it suddenly drifted toward the net without resistance. When I turned the flashlight into the net my fish was a crappie. It was better than fourteen inches long and must have weighed at least two pounds. I am trying to land another of that size but so far have been unsuccessful.

Crappie are the largest members of the sunfish family. For scientific purposes they are called Black Crappie or Calico Bass and White Crappie. As a panfish they bite readily and eat well. They are found throughout continental United States and even cross the border into Canada. Anglers find them moving into the shoreline waters shortly after the first frosts. I would suspect that they would rank high if a poll were taken to determine the most popular among the pan fish.

I was surprised to find that among the winning recipes in a national contest for outdoor cooks one called Crappie and Grass. I have long known that a platter of crappie fillet that have been rolled in seasoned meal and fried in deep fat were extremely edible to say the least. Serve with watercress salad and a few strips of dill pickle. If company fails to come . . . who cares?

NEW KINZUA COUNTRY BROCHURE NOW AVAILABLE

A NEW MAP OF the Allegheny National Forest and the Kinzua Dam Vacationland in Pennsylvania's Warren and Forest Counties is being offered free to interested outdoorsmen by the Kinzua Dam Vacation Bureau at Warren.

The map includes the Kinzua Dam and Reservoir and an index to recreation sites such as camp grounds, beaches, picnic areas, boat launching locations and fishing areas.

The publication also contains information on bag limits and season dates in Pennsylvania, as well as motels, hotels, cottages, cabins and both private and government operated campsites. Names of license issuing agents in Warren and Forest Counties, game protectors and waterways patrolmen also are included.

Of special interest to fishermen is a detailed story on the best places to fish for trout, large and small mouth bass, walleye and muskies in the reservoir on the Allegheny River and in more than 500 miles of trout streams.

The map is not limited to Warren and Forest Counties but also includes McKean and Elk Counties as well as parts of Jefferson, Clarion and Venango.

The folder can be obtained free of charge by writing the Kinzua Dam Vacation Bureau, Box 844, Warren, Pa. 16365.



AWARD GIVEN

PAUL SOWERS, Allegheny County waterways patrolman, accepts a "Certificate of Appreciation" from former County Commissioner John McGrady on behalf of the directors and officers of TRIAD (Three Rivers Improvement and Development) in Pittsburgh. Sowers also accepted a similar award on behalf of Pennsylvania Fish Commission Executive Director Robert J. Bielo.

In addition to his duties as a waterways patrolman, Sowers also illustrates the monthly "Notes From The Streams" section of the angler, written by the Commission's other waterways patrolmen.

continued from page 14

SEABAG / *CANOE COMEBACK*

Youth Hostels, reports "a tremendous increase in canoeing activity in the western portion of the state."

AYH distributes a guide to canoeing on the rivers of western Pennsylvania and during the past year, said Sundquist, that organization distributed at least 300 canoeing guides with little or no publicity. "With some help," he noted, "American Youth Hostels could have distributed three to five times as many guides in one year."

"Within a few years," he estimated, "the most popular canoeing areas, such as the upper and lower Youghiogheny, will be clogged with canoeists."

"The reason for canoeing popularity on this stretch of water," Sundquist said, "is because there is always water—it doesn't dry up during the hot summer months."

Another canoeing enthusiast is John Sweet, of State College, who indicates that participation in the sport in that section of the state reached its peak about 1961 or 1962 and has remained at that level, or with just a slight increase, since then.

An advisor to the Penn State Outdoor Club, Sweet said "white water canoeing as an organizational activity began with the formation of the Penn State Outdoor Club's Canoe Division by Tom Smyth in 1957, and there has been a slight increase in participation over the last six or seven years."

Sweet has divided local canoeing activity into two categories: cruisers and the racers.

The racers, said Sweet, prefer specially designed fiberglass white water racing craft—both canoes and kayaks—because of their ease of handling and maneuverability.

"Cruisers, on the other hand," said Sweet, "generally stick to the standard model of aluminum canoes although some are adopting the racing design for trips for the very same reasons as well as their ability to navigate rough water."

At present there is no one guide covering all the canoeing waters of Pennsylvania.

However for more detailed information on the rivers of western Pennsylvania contact: American Youth Hostels Inc., 6300 Fifth Ave., Pittsburgh 32, Pa.

For information on the rivers of eastern Pennsylvania contact: Robert McNair, 32 Dartmouth Circle, Swarthmore, Pa. 19081. McNair is a member of the Buck Ridge Ski Club which distributes a canoeing guide prepared by Jeff Wilhoyte.



CHAMPION JOHN HUDEC, tallest, and left to right William Arrow, 2nd, Fayette, 1966 champion· Robert Divido, Nanty-Glo, 3rd; and Ralph Santucci, Clarksville, 4th.

ON THE ALLEGHENY—

NEW CHAMPS EMERGE DURING ANNUAL CONTEST

by Steve Szalewicz

JOHN HUDEC OF PITTSBURGH won the ninth annual Pennsylvania State Fishing Tournament held in Tidioute, Warren County, in October.

Hudec's two-day catch consisted of 12 walleyes and 10 bass. He caught the walleye on minnows and the bass on hellgrammites.

Like the 1967 champion, Doug Perrett of Pleasantville, Hudec is a college student. Twenty years old, he is a health and physical education major at Slippery Rock State College. If he can read his text books like he can "read" the river, college courses should be a "snap."

The new champion made his catches in Yeager's Eddy, about three miles down the Allegheny River from Tidioute.

Hudec has some advice for anglers who claim their luck has been "bad" since the installation of the Kinzua Dam at Warren a few years ago.

"You have to change your method of fishing. I used to wade out to my best holes. Now the Kinzua is keeping the Allegheny River level several inches higher.

"It's impossible to reach many of the good spots now without a boat. I've adjusted my fishing to these changes," he said.

The 1968 contest at Tidioute drew the most participants and they in turn produced the best catches ever for the two-day period—226 bass, walleyes, northern pike and muskellunge.

Hudec received, in addition to a trophy and crown, a check for $150.

SOME OF the 226 fish caught in the contest; in big ice-filled fish box.



CROWD AWAITING announcement of winner.



FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



LEFT—PROBABLY BIGGEST muskellunge caught in Pennsylvania during 1968 was this 52 inch, 37 pound whopper captured by angler Robert White of Albion. White was fishing Conneaut Lake in Crawford County, using a 12 inch sucker as bait when he made the catch in mid October. He, of course, won a spot in Pennsylvania's Husky Musky Club as well as a Pennsylvania Angler Fishing Citation.

RIGHT—RIDGWAY ANGLER Jeff Marzella holds nice 18½ inch rainbow he caught opening day last year just below the Ridgway Reservoir. He was using salmon eggs when he made the catch.





CARL ALLEN of Sharpsville with the 43½ inch, 25½ pound muskellunge that made him one of the youngest members of Pennsylvania Husky Musky Club. The twelve-year-old angler caught the big fish on a nightcrawler from Crawford County's Pymatuning Lake last April.



LEWISTOWN ANGLER Frank O. Cupper is probably one of the first anglers to catch a legal muskellunge from the Juniata River in Mifflin County. Cupper landed this 30¼ inch musky June 30 last year and received an Honorable Mention Award.



ROCKY BAGGIOSSI, 15, of Sharpsville holds 22 inch, 4 pound channel catfish which won him a Junior Pennsylvania Angler Fishing Citation. He caught it on a nightcrawler from the Shenango River in Mercer County.



LEFT—DONALD PATTERSON of Lilly holds the 38 inch, 14 pound northern pike he caught while fishing Glendale Lake in Cambria County last fall. Patterson landed the Citation size fish with spinning gear.

RIGHT—MARK ABRAHAM, right, caught 28½ inch northern pike while fishing Ridgway Reservoir during the summer of 1968. With him is Roger Dillion. Both are from Ridgway. (photo courtesy Ridgway Record)



FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



LEFT—NEWTOWN ANGLER Walter G. Bowditch Jr. won a Pennsylvania Angler Fishing Citation when he landed this 15½ in., 1 lb., 15 oz. black crappie at Little Mud Pond, Pike County.

JIM LEGROS of St. Benedict holds nice stringer of largemouth bass he caught while fishing Lake Glendale at Prince Gallitzin State Park. Fishing late evenings and early mornings, he consistently lands nice ones like these using purple artificial nightcrawlers and poppers.





JEFF SHIPMAN of Mechanicsburg holds 25½-in., 8-lb. carp that won him a Junior Pennsylvania Fishing Citation. The 10-year-old angler used a soft shell crab when he made the catch.



SCOTT BUBAR, 9, of West Brownsville holds big carp he caught last spring while fishing at the Confluence Dam in Somerset County. He won a Junior Fishing Citation.



LAURELDALE FISHERMAN Walter Eckert holds 39 inch, 15 pound northern pike he caught during the fall from Ontelaunee Lake in Berks County. He was using spinning gear and minnows when he caught it. He, of course, won a Pennsylvania Angler Fishing Citation.

BE SURE . . .

. . . to include your name and complete mailing address ON THE BACK of the pictures you send to Fish Tales as well as all information about the catch such as place caught, date caught, length and weight of catch, type of equipment used, bait and fishing method. Allow several months for publication.

Let's see the big ones YOU catch in 1969!



CARBONDALEANS Jos. Arnese (L) and Pat Vadala (R) hold big trout caught fishing Lake Wallenpaupack. Arnese holds 21 in. brown and 17 in. rainbow. Vadala holds 18 in. rainbow.



WM. TRUTT, New Cumberland won a Senior Penna. Fishing Citation last fall when he landed a 30-in., 15-lb. channel catfish from the Susquehanna River, Perry Co. He used a fly rod and crayfish.



FISHERMEN Walter Hargraves of Mullenberg, Drew Coffman of Berwick, and Robert Fowler of Glen Lyon hold a stringer of bass and walleye they caught late in September from Sylvan Lake in northeastern Pennsylvania.



YOUTHFUL ANGLERS Peter Stumpf and David Hauger of Somerset with a pair of largemouth bass they caught during a fishing contest last summer. A second prize was awarded Hauger for his 11¾ inch largemouth.



FATHER AND SON Ken Waggoner Sr. and Ken Waggoner Jr. both of the Boiling Springs area won the two top awards in the annual Allenberry Fly Fishing Award contest last summer. Ken Jr. holds the 24½ in. brownie he caught after his father landed a 21½ in. brownie from the Yellow Breeches.



CLYDE BUELL, FISH COMMISSION maintenance foreman of Region II holds a catch of largemouth bass he made at Lake Somerset this fall. The largest weighed 4½ pounds and measured 20½ inches. Both were caught on a jitterbug.



FISHERMAN WILLIAM KOZA of Laflin holds 19 inch, 2 pound 8 ounce brown trout he caught from Monroe County's Deep Lake last spring. He was using spinning tackle and nightcrawlers when he caught the nice brownie.



CORRINE M. COLEMAN of Honesdale holds 22 inch, 5 pound largemouth which she caught while fishing Lake Cajaw. She was using spinning gear and a rapala. The big bass fell just one inch short of Citation size.



FOURTEEN-YEAR-OLD Rodney Stanick of McKeesport holds nice rainbows he caught while fishing Sandy Lake. One of the fish measured 15¼ inches while the other was 17½ inches. Both fell to the temptation of cheese.



STOYSTOWN ANGLER William McVicker holds 41¾ inch, 17½ pound muskellunge caught at Lake Somerset. It won him membership in the Husky Musky Club.



FIFTEEN-YEAR-OLD Bruce Nicholson of Dravosburg (right) became a Junior Pennsylvania Angler Citation winner when he landed this 14¼ inch, ½ pound bullhead while fishing the Monongahela River in Allegheny County. He was using worms when he made the catch.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

COOPERATION HAS LONG BEEN THE KEY WORD in this column and the Bald Eagle Sportsmen's Club, near Tyrone, typifies the use of the term. Let's check the history of the Blair County group a little closer for some proof.

Founded originally in 1945 by F. S. Ambrose, an old fox trapper, the organization didn't begin to raise fish for area streams until 1955. Considerable assistance and advice came from the people at the Federal Fish Hatchery at Lamar. About 10,000 brown trout were placed in a section of Van Scoyc Run, and in spite of inexperience, over 8,000 of them were stocked in the spring of 1956.

Expansion was in order and the club purchased 600 feet of Big Fill Run near the club grounds. Two rather large ponds were built and 20,000 browns were placed in residence. Again the Lamar folks came to the aid of the club with technical advice and other forms of assistance. Particular thanks from the club went to Superintendent Tanner of the federal fishery.



GROUP GATHERS on grounds of Bald Eagle Sportsmen's nursery near Tyrone. From left to right they're Paul Buyers, Pennsylvania Fish Commission; Tom Tingle, club feeder; and Jake Friday, only remaining charter member of the club.

The Pennsylvania Fish Commission took official notice of the Bald Eagle nursery in 1957 and has been working with the group ever since. About 30,000 fingerlings are provided each year along with technical assistance through Bob Brown and Paul Byers of the Fish Commission.

Jake Friday, last of the original charter members and our guide, went on with the story. "In 1962 we enlarged a bit to the two ponds and the two concrete raceways that you see now. We added the lower pond to hold over a few larger fish in 1963. Other than maintaining the nursery, we've made no major changes in the last five years."

Tom Tingle, the nursery feeder, chimed in at this point to indicate more of the cooperative thing. "Our club owes a vote of thanks to the Juniata Packing Company of Tyrone for the donation of meat that is ground for us by the company. They give us the stuff each week. It's good food and the trout gobble it up. Without this gift we'd have a real problem if we had to buy all of our feed," and Tom went on into a string of statistics to prove his point.

A few of the figures might be worth injecting at this spot. Not counting the 1968 fish, the club has stocked 203,000 legal fish in Blair and Centre County waters. Total cost to the club over the 12 year period was $3160. This works out to an average of about 17,000 legal fish a year with an average cost of $265 to feed them. The vote of thanks to the packing firm is obvious.

While cudos were being passed around, Tom mentioned the help within the club itself. "We have a good fish committee with John Dunkel at the head of it. He makes it go—in fact, a lot of fellows around here think of John as 'Mr. Bald Eagle Sportsman'—and that's what any club needs—a sparkplug."

However, it hasn't been all sunshine and roses at the Bald Eagle club. This year, for instance, there has been a slightly higher mortality rate. As a result the club plans to stock all of its fish prior to April's trout season. Usually a few thousand are held back each year so that some larger fish may be stocked. When the stocking is completed, the ponds and raceways will be drawn, treated and cleaned well in time for the arrival of the new fingerlings later in the year.

Some human predator problems have developed, too, although on a small scale. Club members have erected night lights and the lower pond, containing the two-year old fish, is protected by a double-apron barbed wire fence that would do credit to any Green Beret outfit. Club members emphasized that this was a minor problem. Tingle expressed it for the group by saying "Most guys around here do the right thing—we don't lose many fish from stealing."

Streams benefiting from the efforts of the Bald Eagle Sportsmen include: the Bald Eagle Creek and its tributaries, Van Scoyc Run, Big Fill Run, Millers Run, California Run, Trout Run, Cold Stream Run and Six Mile Run. The streams course through Blair and Centre Counties. And that about wraps up the story of cooperation as related to the Bald Eagle Sportsmen's Cooperative Nursery. The membership is looking ahead to the next batch of Pennsylvania Fish Commission fingerlings so that they can continue to prove that *Casting with the Co-ops* pays dividends for Pennsylvania fishermen.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

From V. T. L., Homer City:

"There seem to be a lot of complaints about the inboard-outboard units on many new boats. Which make is the best?"

—Most of the difficulties owners have experienced with the sterndrive units can be traced to one of two major causes: (a) mistreatment of the equipment, or (b) lack of maintenance. All of the major manufacturers of these units have had some development problems, but have been very good about correcting these under warranties. The real problems come from abuse of the unit by the operator. A common cause of lower unit gear failures is shifting too quickly from forward to reverse. This chews up the gears faster than anything known, except for the other most frequent fault—failure to lubricate the unit. Most sterndrive units with a history of trouble are owned by people who have previously owned only inboard boats with conventional shaft arrangements. The marine transmissions used in these plants will stand a good deal of emergency astern work, and of course, there is nothing in the water that requires lubrication. Outboarders who switch to sterndrive power have much better success, since they are accustomed to treating their equipment more sensibly and giving it proper lubrication.

From C. J. R., Sharpsville:

"What is a practical way to add flotation to my 16-foot aluminum fishing boat?"

—Try installing thin planks of styrofoam inside the hull plating up under the gunwales. This can be glued in place with a special compound sold by the firms handling styrofoam. The reason for keepng the material high in the boat is to keep it floating upright when full of water. If you use two-inch thick material, each square foot will float about ten pounds.

From J. L. M., New Kensington:

"While pulling my docks out of the Allegheny this fall I found a sunken 14-foot fishing boat. Can I keep this as salvage?"

—Not so fast. If the boat has bow numbers, write the Pennsylvania Fish Commission to find out who owns it, then notify him that you have the boat. If there are no numbers, advertise in your local paper under "lost and found" and make inquiries at nearby docks. If no one claims the boat, you can of course keep it. However, if the owner can be found, your salvage right is limited to a claim for the reasonable value of your services in saving his property. You can retain possession of the boat until you are paid, and charge storage in the meantime. In the event that the owner refuses to pay anything, but demands his boat back, you will possibly require the services of an attorney.

From L. A. S., Northeast:

"How can I determine the true value of a boat I am considering purchasing?"

—This is a little like asking how high is up, but here are some general thoughts on the subject. First off, unless you are really an expert, I would suggest employing a qualified marine surveyor to inspect the boat thoroughly. This service costs between $1.50 and $2.50 per foot of the boat length, plus travel. Your insurance company can recommend a qualified surveyor in your area. The surveyor will report to you on the condition of the boat, in detail, and include an appraisal that takes into consideration such things as local market conditions, the availability of and demand for that particular model, the boat's equipment, and many other things. Armed with this information, you will know generally what the boat is worth, but that is still only half the solution. Your next step, and often the hardest, is to convince the seller that he should part with the boat at what you feel is a reasonable price. Good luck.

From A. T. H., Belle Vernon:

"Where can I get information on building a reinforced-concrete boat?"

—The only publications we know dealing with this recent development (recent as applied to pleasure boats, that is; barges and other large floating structures have been made of ferro-cement for years in Europe) are two available from Samson Marine Design Enterprises Ltd., P.O. Box 98, Ladner, B.C., Canada. The full treatment is "How to Build a Ferro-Cement Boat," at $9.75. A shorter but very complete work is "A Manual of Ferro-Cement Boat Building," at $5.00.



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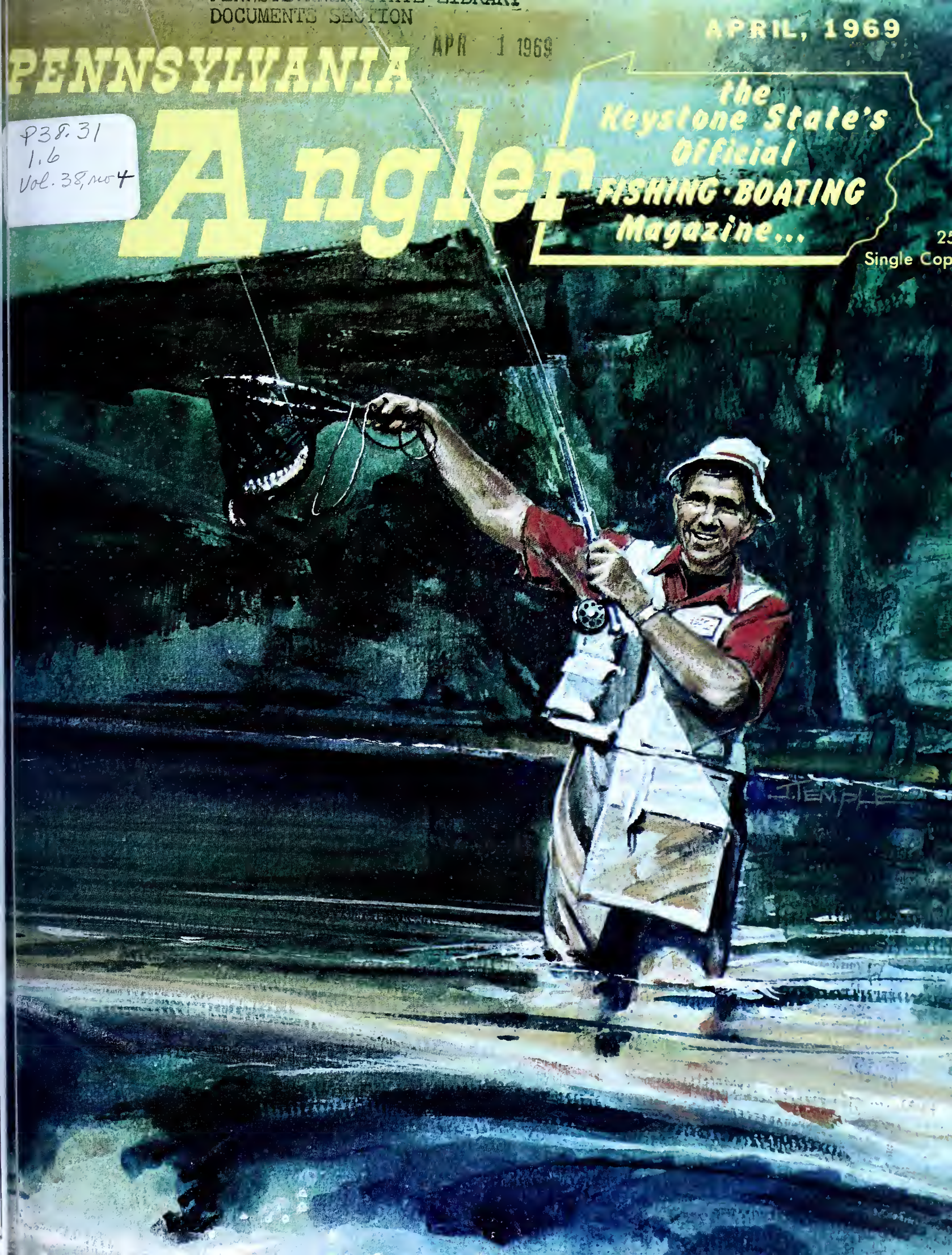
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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



SAFETY

Spring is a busy time for outdoors-loving Pennsylvanians. The sun's warming rays provide a high level of attraction, luring young and old outdoors. Sucker fishing is a fine way to shake off the winter's staleness and, of course, the opening of trout season in mid-April really announces the coming of Spring. Smaller fishing streams are usually moderately high, lightly colored and just right for fishing. However, our larger streams and rivers often continue to run almost bankfull and carry heavy loads of silt and debris through most of April. Thus, while April is a month of nature's beautiful reawakening it is a time for extreme caution for those who venture onto the swollen muddy rivers and large streams by boat.

Each Spring many unnecessary tragedies occur when the unwary fisherman or pleasure boater goes for that first trip afloat for the season. Strong currents and submerged logs hidden by muddy waters provide serious safety hazards that can and do set the stage for capsizings and sinkings. A ducking in April can mean real trouble and possibly result in the loss of life. Cold water, heavy clothes and strong currents can defeat the strongest swimmer. The scarcity of other boats operating in the early season may leave the capsized boater with little chance of prompt rescue.

Certainly no one wants to add his or her name to the list of accidental drownings. Observations of ordinary water safety rules, honest recognition of your own boating skill and the capability of your boat and boating with a buddy, especially on strange waters and during cold weather, can help assure your trips afloat are two way—out and back in safety.



MAKE YOUR FRIENDS

(AND YOURSELF)

HAPPY



HELP THEM DISCOVER



PENNSYLVANIA ANGLER

(Pennsylvania's Official
Fishing and Boating Magazine)

EASY DETAILS

INSIDE REAR COVER

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

APRIL 1969 VOL. 38 NO. 4

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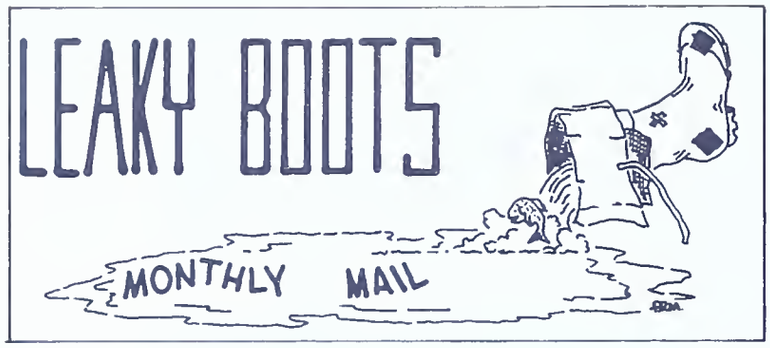
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TOYS—

Gentlemen:

The snowmobile, which you examined with evident approval in the January issue, may have limited value as a rescue vehicle, or to a true outdoorsman who has lost one or more legs, but otherwise it is simply the latest mechanical toy of a too affluent society which has already gone dangerously soft and decadent.

Taken with all the other trail vehicles and the inevitable flying pack now in the experimental stage, this noisy and unpleasant machine represents the ultimate threat to our beleaguered wilderness values.

Use of all trail machines on public lands should be severely restricted.

Ed Van Dyne, Troy

MORE "FLY TYING"

Dear Sirs:

I can't tell you how much I enjoy the new fly-tying department in the Angler. I feel that this fine magazine needed it for a long time.

However, if I remember correctly, in a past issue you stated that it would continue for only a short while. To me this is wrong. If Pennsylvania is to get away from the market fishing era, then fly tying and fishing is all too important. Don't misunderstand me, I'm not criticizing spinning and bait fishing, if that's what another angler enjoys. I'm merely stating that we need more sport fishermen and this is where fly tying comes in. I need not go into detail on how satisfying it is just to catch fish on a fly you've tied.

Therefore, may I offer a suggestion. Why not continue the fly tying department indefinitely? If Mr. Lively found it to be too much of a responsibility to write directions for a different fly every month, then perhaps different people could send in their stories. This way you would have people from all over the Commonwealth contributing patterns that are effective in their areas.

Mark Volk, Irwin

Unfortunately a lot of Angler readers already send us "write ups" on their own "special" patterns. What they fail to include are top quality, professional illustrations and adequate step by step instructions for tying the pattern. A person must be a first class illustrator and writer as well as a top rate fisherman and fly tyer in order to make a series like this successful.

Mr. Lively's feature began last fall after a number of readers requested such a feature for the winter months. Present plans call for discontinuing the series during the summer issues and then starting it again in the fall.

—Tom Eggler, editor



"THERE'S THE RIVER—SMOOTH SAILING FROM HERE ON OUT!"

TAKES EXCEPTION—

Gentlemen:

In the December issue of the Pennsylvania Angler Mr. Buss's reply to a letter from Mr. Ronald S. Kommer of Darlington is too disturbing to pass over.

First of all I take exception to the assertion that even on good self-sustaining streams 90 percent of the fish have been stocked. I would like to remind you of the fish-for-fun regulations on the Left Branch of Young Woman's Creek as it was managed from 1958 to 1963. If my information is correct, only 2,035 adult trout were initially stocked along with 965 fingerlings in 1958 and a thousand more fingerlings in the waning days of its termination. "Natural spawning of trout was successful and apparently this contributed significantly to fishing success on the stream. I recall we electrofished the stream in about 1960 and found a very attractive population of trout."

The quoted material is taken from a recent letter in which Gordon L. Trembley, Assistant Executive Director of Fisheries answered my questions pertaining to the Left Branch. Although he does not specifically say so, I judge that stream production generously exceeded the ten percent that you would allow as stream bred fish. The Letort is perhaps an even better example of a self sustaining trout population, and it owes its success entirely to the absence of state management.

Next, Mr. Buss seems to think that Mr. Kommer's suggestion to lower the size limit on fish-for-fun waters is unreasonable because "the Fish Commission could not afford to stock all 15 and 16 inch fish." Under the present regulations where a trophy fish is defined as a trout of 20 inches or longer, I was unaware that only trout of trophy size were being stocked in fish-for-fun waters. This is particularly disturbing since the average size of the fish I have taken on these projects has averaged scarcely more than a foot long. The obvious point of Mr. Kommer's suggestion which Mr. Buss apparently missed was that a lower size limit would not seriously damage the fishing since it would protect the most valuable catchables, those fish of fourteen

inches or less. In any event a few pertinent facts would be more convincing than his phantasmal impressions.

Most distressing of all, however, is Mr. Buss's eagerness to overlook the genuine efforts of a conservationist-angler to improve the quality of fishing on Pennsylvania's trout waters. No one suggests that the Commission "create" new trout streams as Mr. Buss says—we are in fact grateful for whatever crumbs are left to us in this mad society of superficial affluence. But we may at least expect the Pennsylvania Fish Commission to provide reasonable management on our remaining streams rather than to have it yield to the demands of a greedy society that readily destroys not only its fish but its water as well.

Richard L. Henry, Lebanon

AGREES 100%!

Gentlemen:

Just finished reading the December issue of the Pennsylvania Angler. I enjoyed Mr. Buss's answer to Ronald Kommer's letter very much and agree 100%. I don't know why some fishermen who only use artificial lures—flies—look down on people who take trout on bait. I have been a trout fisherman since I was 16 years old. I came out to Washington in 1950. We have some fine bass fishing in this area, but I very seldom fish for them. I take trout on a wet fly, a streamer, a few on dry flies, night crawlers, spoons, spinners, worms, salmon eggs and marshmallows.

Fishing for trout is fun no matter how you catch them. I have hiked into the back country and taken brook trout on night crawlers and spoons and I have taken rainbows on wet flies and nymphs on opening day of the season. My favorite back in Pennsylvania was always the rainbow and still is. He is the best fighter of all the trout.

One of the things a lot of the purists forgot is that the Fish Commission must try to please a large number of the people. I'm sure the Pittsburghers appreciate the fine fish you plant in North Park Lake no matter what they catch them on. A former Governor of Pennsylvania said when he was in charge of the Forest Service that the National Forest would be administered for the greatest good of the largest number of people.

This past spring we were fishing a lake near Spokane. A man, his wife and two small boys (about ages 5 and 7) were fishing and really having a ball. They were taking the trout on small white marshmallows. Here was family fun at its best. The lake was full of fish as 125,000,000 3 inch fry had been planted the spring before. I tried this several weeks later with a friend who was a very good fly fisherman. After taking only one small 6 inch fish on a fly, he joined me in taking them on marshmallows.

I'm tying my own flies for steelhead now, but after several trips have not received a strike. My fishing partner is probably the best steelhead fisherman in this area. He takes and releases over 100 every year still he looks down on some of the steelhead fishermen who take steelhead on cluster eggs and worms. Why he feels this way I don't know for he will take more steeelhead in a year than 98% of the fishermen who use other bait.

I've enjoyed reading Mr. Buss's article about the fishery program very much. I also enjoy reading the "Casting with the Co-ops" series. I'm sure these clubs are a great help to trout fishing in Pennsylvania. I never heard of anything like that out here.

Another gripe I have about some fishermen is that they complain about the Fish Commission all the time. And from the pictures each month of the fine fish caught in your state I think Pennsylvania has excellent fishing of all kinds.

We have a very fine Department of Game here, but likewise some hunters and fishermen gripe at them all the time. Your gripers all should remember trout fishing is fun, no matter how and where you take them.

Edward Naughton, State of Washington

A GOOD LOOK

Gentlemen:

Today, after a lapse of 11 months, I'm again a subscriber. I knew last year at this time that my subscription was due for renewal but put it off until . . . SUDDENLY, no Angler. Now that it is finally back, I realize what I've been missing! I can safely assure you that it won't happen again.

After reading the Angler from cover to cover and digesting it all, I went back to the monthly letters section to make sure that the letter I read from Mr. Ronald Kommer, directed to Mr. Buss, was for real. I read it again, and again, and again. CONSENSUS? 15% for Mr. Kommer and 85% for the Fish Commission. In defense of my math figures, I submit this, both to Mr. Kommer and/or the Commission and the Angler, for I hope you will print this rebuttal as soon as possible.

I LOVE TO FISH! I place this sport above all others—bar none! To fish the way I like to, I travel about 240 miles from Buffalo, New York to Hughesville, Pennsylvania to pick up my fishing partner. You're probably wondering why I travel so far when Lake Erie and the Niagra River are at my front door? Here are the reasons. 1. FLOATING DEAD AND NEARLY DEAD FISH (all sizes and types). 2. OIL SLICKS. 3. UNTREATED INDUSTRIAL SEWAGE. 4. FLOATING SANITARY SEWAGE. 5. MASSES OF FLOATING, BUBBLY DETERGENTS. 6. ILLEGALLY DUMPED TOXIUS CHEMICALS, and most important of all: 7. NO EATABLE, FIGHTING, TROPHY, or PENNSYLVANIA ANGLER FISHING CITATION SIZE FISH!

But, let's not stop here. I was born and raised in Pennsylvania and relish fishing there. I've taken Canadian trips, fished in one of the south's most productive bass lakes, and taken a few stints to the Finger Lakes. But strangely enough, I have NEVER (let me repeat that), NEVER produced in any of these places a 6 pound 4¼ ounce smallmouth bass, a big muskie, a nice brookie or a big brown trout with the exception of one place. You guessed it—PENNSYLVANIA!

You have the best and the most—and for what? Well, for the price of a $5.00 fishing license. (It costs me $9.50.) So now Mr. Kommer—and to the folks who side with you—let me close with this. Take a real good look around you the next time you're on one of those fish-for-fun

LEAKY BOOTS
continued

streams. Wade around in some of that clean, cool water, and from time to time, bend over and take a long satisfying drink. Then cast your Light Cahill into the stream, have a good long fight and then mail me a picture of that trophy trout—you know, the one that was stocked a couple years back by that same Fish Commission you call politically oriented and the creator of mob scenes. Their job was nursing that trophy fish of yours, not that I want to leave out the fact that they always seem to be handy to nurse a few grumpy anglers too.

If I sound bitter, it's only because I am. I have no personal quarrel with Mr. Kommer and I fully realize that he may be in the enviable position of being "too good" an angler. My sincere love for the sport and my wish that my children and grandchildren may enjoy the trout and other game fishing made available to me by YOUR OWN Pennsylvania Commission makes me write this letter. And finally to you, THE PENNSYLVANIA FISH COMMISSION and the great publisher of the ANGLER, let me say this: Don't ever let me read in any issue, the words "We try harder." You don't need to. With the way you both operate, you've got to be Number One.

Thanks for listening. I think I'll sharpen the hooks on my lures as soon as I mail this!

—Ronald E. Poust, Buffalo, N. Y.

IT'S "OLD HAT"

Gentlemen:

Enclosed is a check for $5.00 for the Angler for another 3 years. I cannot praise the Angler too much for so far as I am concerned it's tops in its field. You fellows are sure doing a wonderful job!

I was going to write you about the enjoyment I had during the extended season, but the answer that Keen Buss had in the last issue in answer to Ronald S. Kommer, expressed my opinion much better than I could myself. He certainly is correct. The special fishing areas are full of trout, because they are put there by the Commission. It's getting to be "old hat" to write every year and say I think that you are all doing a good job, but I just cannot help to say it again. I had a most wonderful season, right up to the end of October.

H. E. "Frenchy" DuBroux—DuBois

PATIENCE, ENTHUSIASM

Gentlemen:

On weekends and during the weeks of the summer vacation it's interesting to see the enthusiasm my 13-year-old son has for fishing. He puts everything into it—especially patience, which one must have a lot of in order to catch "the big ones."

And when winter came he filled the rather long and sometimes uninteresting evenings by making jigs.

In the October issue of the Pennsylvania Angler an article titled "S.O.P. For Catching Walleye" made him decide to try to make some of his own. After talking to his uncle, who is a great fisherman, he found he had access to some equipment needed for making jigs.

He has a small workshop all of his own where he can work. A vice is screwed to a table that securely holds the lead-headed hooks. Bucktails have been obtained from hunter friends and dyed to make colorful jigs if desired. A little paint, lacquer, razor blade, thread and bobbin add to the necessities of this hobby.

For three years we have been fishing (as a family) and have received the Pennsylvania Angler and we think it's a great magazine. Every page is read and re-read and incidently all the issues are kept for future reference.

Mrs. L. Baumgartner, Sharon

NEARLY ANOTHER

Gentlemen:

I am writing you once again with a little fishing information for the Angler.

Enclosed is a photograph of a northern pike that I caught on July 30, 1968 at Conneaut Lake. It does not quite qualify me for a Senior Citation because it was 34½ inches while a northern must be 36 inches.

This fish was an even 12 pounds and hit on a large minnow fished on the bottom. My brother Al netted him for me and as soon as he landed on the bank, he tore through the bottom of the net. We promptly rode into town that afternoon and bought a new net, but the only use we had for it on the balance of our vacation was to land a snapping turtle of eighteen pounds.

This brought me close to my second Citation, having been a winner in July, 1967.

In closing, let me say I really enjoy reading my Pennsylvania Angler every month. Keep up the good work!

Verne A. Rihs, Pittsburgh

And the picture of Mr. Rihs with his nice northern appears in the Fish Tales section of this issue.

AN EMPTY CREEL—

Dear Mr. Bielo:

If there was a slogan that one might try to impress upon the fishing public it might run something like this:

"DON'T BE A HOG—THE SECRET OF GOOD FISHING IS AN EMPTY CREEL."

So far as I am concerned, the pleasure of fishing is in the catch, not in the keeping, and for this reason I take off my hat to the Pennsylvania Fish Commission, to the landowners, to Patrolman Perry Heath, and to the Yellow Breeches Anglers for the establishment of the Fish-For-Fun Area at Boiling Springs.

I have fished this area for quite a few years. Last year, however, I spent nearly all my fishing hours there, and they were many, and never had I a season like it. Congratulations! Don't change it! For I hope to spend many more hours there this coming season.

Gerald P. Nye, Harrisburg

COMING - - -

SUPER EDITION—

HERE IT IS—YOUR 1969 SUPER SIZE, PENNSYLVANIA ANGLER! IT'S SIXTY FOUR PAGES BIG, JUST TWICE THE SIZE OF OUR REGULAR ISSUES. YOU'LL FIND IT FILLED WITH A NUMBER OF INTERESTING AND MEANINGFUL ARTICLES. WE HOPE YOU ENJOY IT!

NEW OPENING HOUR

Keep in mind that this year trout season opens Saturday, April 12 AT 8:00 A.M. INSTEAD OF AT 5:00 A.M. AS IN THE PAST. The new opening hour was set by the Commission when numerous complaints were filed by property owners after fishermen camped, built fires, and littered private grounds throughout the night as they awaited the 5:00 A.M. opening last year. It is hoped the later starting hour will discourage overnight waits along the waterways by fishermen—and ultimately keep some of that ground open to public use which, with another pre-opener night of abuse, might be closed.

WILDWATER EVENTS

This is the "coming out" season for white water enthusiasts and many Angler readers may want to watch, if not participate. On March 30 the Loyalsock International Wildwater Race at World's End State Park will get underway. April 5 the Red Moshannon Wildwater event on Moshannon Creek from Grassflat to Route 53 will be held while April 12 and 13 the Junior and Scout Slalom (for those 18 and younger) will begin one mile south of Reedsville on the Kishacoquillas. And then on April 26 and 27 the Loyalsock International Slalom will be held on the Loyalsock. Last year this was the biggest whitewater event in the United States in terms of the number of entrants so if you're looking for "what's happening" that weekend this may be it!

LINESVILLE OPEN HOUSE

Want to find out where all those warmwater species come from? Then plan to visit the annual Linesville Open House, this year scheduled for Easter Sunday, April 6. Starting at 1:00 P.M. there'll be tours of the grounds as well as demonstrations of methods used to hatch and rear these big fish. You'll see muskellunge, northern pike, walleye, and lots of others!

BOATING PLEASURE

If you're beginning to feel the urge to launch that new power boat—or the old one—you might first want to attend one of the many "Boating Pleasure" courses that will be offered by the Pennsylvania Fish Commission this year. They'll be held in three sessions—two hours at a time—and you may be surprised to discover some of the things you didn't know! Watch your local newspapers for announcements or contact your district waterways patrolman.

BIG FISH

And beginning with the next issue of the Angler you'll be seeing a list of all those big fish registered for Pennsylvania Angler Fishing Citations during 1968. Discover where and how these big ones were caught—watch for the tabulations!



FISHING OUTLOOK

APRIL, 1969

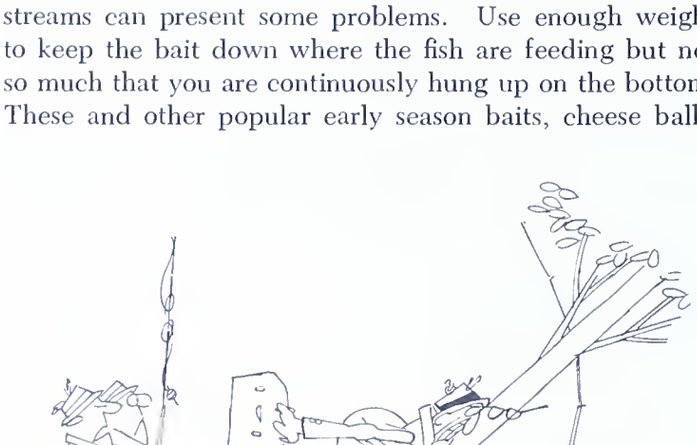
By-- Stan Paulakovich

APRIL IN PENNSYLVANIA IS SYNONYMOUS with one thing—trout fishing! This year's season will open Saturday, April 12th at 8:00 A.M. instead of the usual 5:00 A.M. Anglers as well as generous landowners who permit fishing on their properties will get a few extra hours of sleep.

From A to Z—Ackley Run in Warren County to Zebe Township Rod and Gun Club Pond in Northumberland County—trout fishermen can expect to find conditions which are normal for this time of year. Streams will be running swift and cold from the spring run off and will be discolored. Lake and pond water temperatures are just getting into the forties.

Snatches of conversation from gathering groups along the waters reveal streams familiar not only to native fishermen but streams famous over the entire country. Names like Yellow Breeches, Pine Creek, Broadheads Creek, Letort, Lackawaxen, Bald Eagle, Brokenstraw, Fishing Creek and Loyalsock. Unfamiliar names like Cornplanter Run, Mix Run, Twolick Creek, Snitz Creek, White Deer Hole Creek, Goose Pond Run, Nine Partners Run and Aunt Claras Fork keep cropping and make you wonder about their fishing potential also.

Early in the season probably the first choice of bait over the entire state is garden worms. Fishing these in high streams can present some problems. Use enough weight to keep the bait down where the fish are feeding but not so much that you are continuously hung up on the bottom. These and other popular early season baits, cheese balls, salmon eggs or night crawlers cast upstream and allowed to drift down through the feeding lanes in a natural manner have always taken early season trout.



"I HEAR THERE'S A $10,000 PRIZE FOR THE FIRST TROUT CAUGHT TODAY!"

Minnow fishing in lakes or ponds can be quite productive early in the year. Hook the minnow through the lips or through the back and cast out with a small bobber to signal a strike. When fishing a stream with minnows I've always found it better to string minnows using one small treble hook at the rear. Retrieving causes a spinning effect and when a hit is felt, strike immediately. Fished slightly upstream and across this method can be deadly.

Fishing spinners and spoons in this manner, it is also necessary to keep the lure down and moving fast enough to bring out the action. Lures such as the Devon spinner, Mepps and C. P. Swing in both silver and gold finishes will be much in evidence no matter where you fish.

Early season fly hatches, although not prolific, are common throughout most of our waters. These usually occur during the warmest part of the day. Fishing the riffles in the afternoon when fishing pressure has slackened usually produces well. Patterns such as the Quill Gordon, Blue Quill, Red Quill and the Blue Dun are favored. Attractor flies such as the Fin Fly or the Royal Coachman used in the early season are spotty in their effectiveness. Sometimes they are killers taking many trout while other times they don't even get a bump.

Fishing the streamer can serve a double purpose. Besides catching fish, the tell tale flash of the trout that chases but doesn't take your streamer locates his feeding zone. This makes him an easy target for a worm, salmon egg or wet fly drifted. An attractor type streamer such as the Mickey Finn does better, I believe, for rainbows and brookies early in the year. The exact imitation type streamers of dace and shiners meanwhile will entice even the wariest of browns from his hiding place on certain occasions.

A common and unfounded belief that anyone or anything can catch early season trout leads many people to use equipment and methods not appropriate in any fishing. Hooks, lures, baits and leaders too big for the job are unfortunately too widely used. Samuel Johnson said "Nature never gives up everything at once." All of our waters contain lunker trout which have grown to that size because they were aware of leaders and lures. Lunker trout can be classed as such in relation to the waters they inhabit. A sixteen inch brown taken from the Lackawaxen would be a fair fish but catch one this size from a tributary stream no more than six feet across and you'll have yourself a lunker. On opening day as well as all season you'll get better re-

sults with leaders and lures more suitable to the size of the fish you are after.

Speaking of tributary streams, just about every county has waters where because of their size or location are not stocked with adult trout. Many of these streams hold native brook trout, browns from prior fingerling stockings or rainbows that have moved in from larger waters. The fact that these streams are not stocked leaves them practically deserted early in the fishing year.

I was introduced to trout fishing on such a stream. A walk of three miles brought us to a stream locally called the Third Hollow. There with hooks purchased at a grocery store, two for a penny, and black casting line tied to a stick cut from the woods, worms laboriously dug in the garden produced a bite practically every time but you had to catch about ten of those little brookies before you had one that made the six inch mark. Also called indian trout, mountain trout or natives these fish were a delicacy when pan-fried to a golden brown.

Equipment then was more or less makeshift. We used home made rods, sticks from the woods, or if we were lucky, a telescope rod of steel that weighed about a pound. Hooks were bought separately and leaders were unheard of. Worms were the one and only bait and flies were unknown. If someone had asked me what a Royal Coachman was, I would have probably said "the guy that steers the king's horses."

It would be extremely difficult to select Pennsylvania's best trout stream. Both limestone and freestone streams occur over much of the state. It is generally conceded our prime trout region lies across the Northern tier and down through the central counties of the state. Each of us has favorite waters and one man's favorite isn't always the other fellow's choice. We are fortunate in Pennsylvania to have trout waters in each of the 67 counties.

The following recommendations of district waterways patrolmen of their respective district are based on three factors: 1. Size—ability to withstand heavy pressure. 2. Accessibility, and 3. Available trout populations. Keep these things in mind when choosing your site for opening day. Check the following for streams in the area you will fish.

Adams County has the Conewago and Middle Creek. Allegheny County offers 74 acre North Park Lake and newly opened Deer Creek.

In Armstrong County Pine Creek and its branches and Buffalo Creek will attract the bulk of fishermen.

In Beaver County, try Racoon Creek Lake and the North Fork of the Little Beaver River. Bedford County has much to offer with Bobs Creek, Cove Creek, and Koon Lake standing out. Berks County has the Manatawney and the Tulpehocken. Blair County's Clover Creek has good native trout populations. Bradford County has Schrader Creek and Bucks County has Cooks Creek and Levittown Lake which get the bulk of the fishermen.

In Butler County Buffalo Creek and Thorn Creek look like the best bets while Cambria County fishermen go for Chest Creek.

Cameron County has many good streams and outstanding here are the Driftwood and First Fork branches of the Sinnemahoning and the Stephanson Dam. In Carbon County there are many fine small streams and the Aquashicola and Pohopoco Creek stand out among the larger streams. Centre County has plenty of fine water and Penns Creek is the choice of most. French Creek in Chester County is a local favorite while Clarion County's top choices are Beaver Creek and Cathers Run. Clearfield County is blessed with plenty of trout waters and Mosquito Creek gets a good plug. In Clinton County two fine streams are Big Fishing Creek and Kettle Creek while Fishing Creek is also outstanding in Columbia County. Crawford County's Oil Creek and its branches head the top waters in this area. Another prime water of the state is Yellow Breeches Creek in Cumberland County.

In Dauphin County try Clarks Creek while in Delaware County Ridley Creek gets the big push.

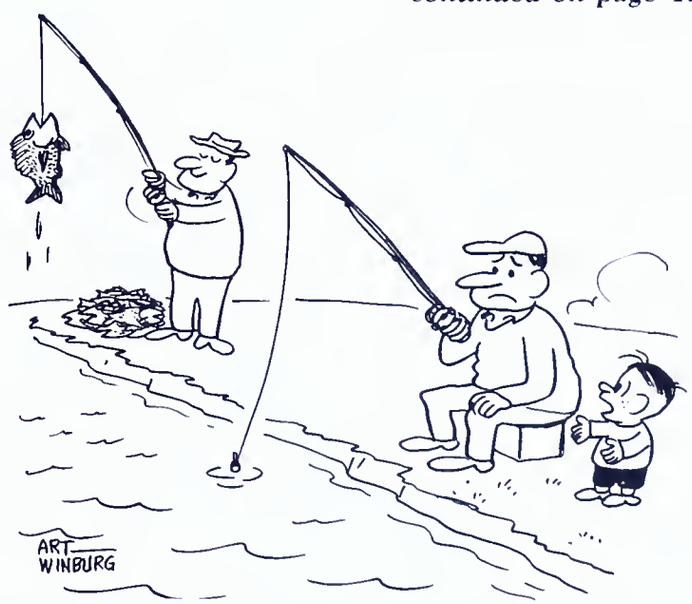
Elk County has plenty of good trout fishing and the West Branch of the Clarion River has the top nod there. In Erie County try Elk Creek.

Fayette County has Dunbar Creek and the tail race of the Youghiogheny River. Forest County's choice is Tionesta Creek while in Franklin County the Falling Springs Branch and Letterkenny Reservoir each year produce near record trout. Fulton County's Cove Creek is another good bet.

In Greene County Ryerson Station State Park Lake is popular. Huntingdon County has over 27 miles of Standing Stone Creek and Indiana County has Little Mahoning Creek.

Jefferson County has the North Fork of Red Bank Creek and Juniata County has Lost Creek and Licking Creek. Lackawanna County's Chapman Lake and the Lehigh River

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"WHEN ARE YOU GOING TO GET WAITED ON, DADDY?"

A RAY OF HOPE MAY BE SHINING FOR SOME OF THOSE USELESS WATERWAYS IN THE KEYSTONE STATE THAT DIED LONG AGO WHEN ACID MINE DRAINAGE FIRST POLLUTED THEM. DR. H. B. CHARMBURY, SECRETARY OF MINES AND MINERAL INDUSTRIES, AND HIS STAFF HAVE COME UP WITH A TWO STAGE ANSWER TO THE PROBLEM. IT MAY PROVIDE . . .

by Wes Blakeley
Public Relations Officer
Department of Mines and Mineral Industry

NEW LIFE For Sick Streams

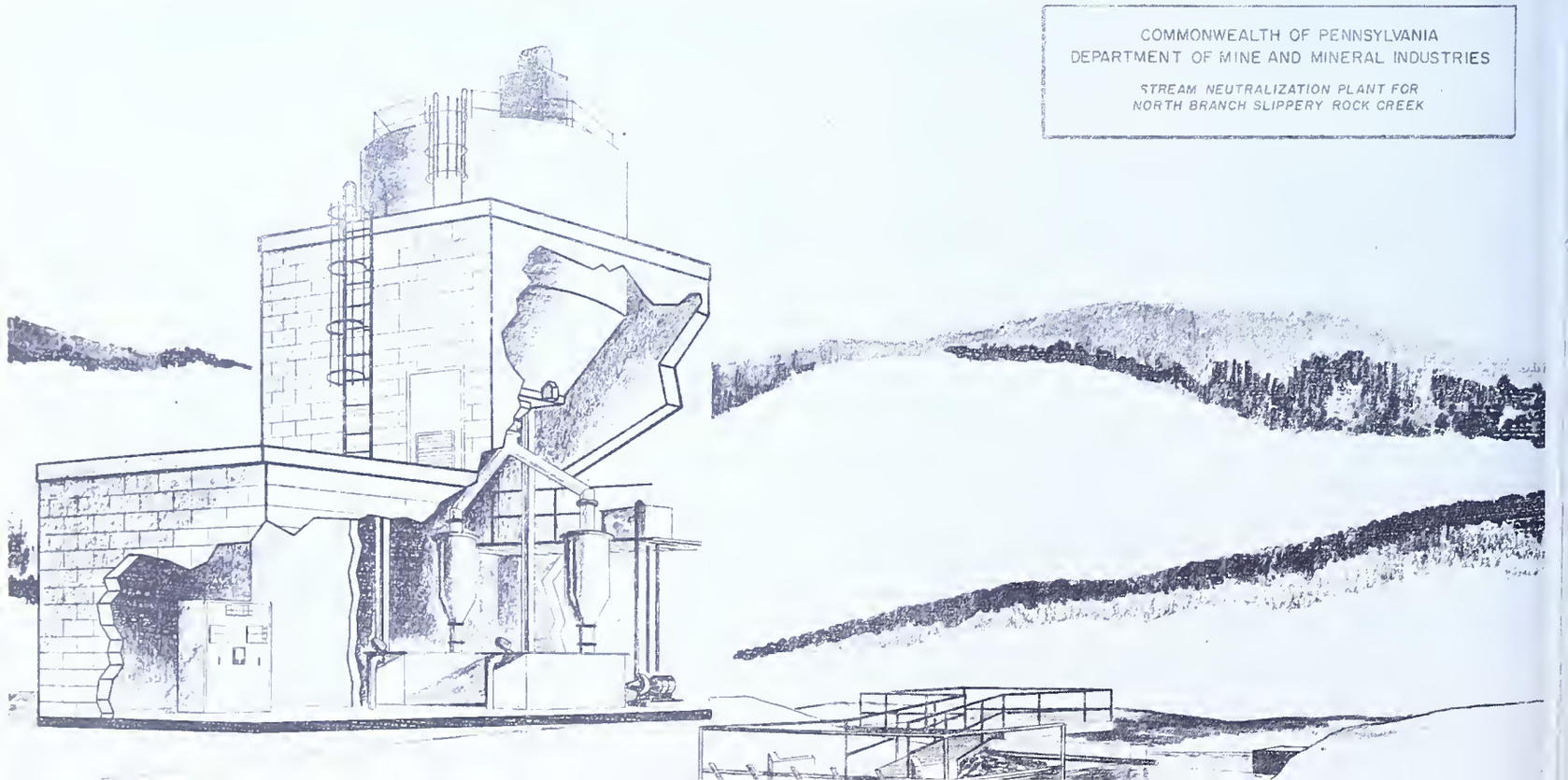
MOMENTUM IS PICKING UP on the Pennsylvania Department of Mines and Mineral Industries' comprehensive water reclamation program to the point where some mine acid drainage-ridden streams in the Commonwealth are now, once again, producing aquatic life.

Such a stream is Little Scrubgrass on the border between Venango and Butler Counties, the first recipient of the Department's massive research program into the matter of finding solutions to the State's abandoned mine drainage problem.

Today, as a result of this research, a semi-permanent lime neutralization plant, the first of its kind in this country, was installed on Little Scrubgrass and on the Rankin Property, Venango Township, in December, 1966. This property was selected for the installation because of its proximity to the nearby abandoned strip mine which was the major source of pollution to Little Scrubgrass, which flows into the Allegheny several miles downstream.

Since this fully automatic plant went into operation, fish life—in the form of bluegills, chubs and brook trout

THIS IS AN ARTIST'S sketch of the proposed new lime neutralization plant that is being constructed on the North Branch of Slippery Rock Creek in Butler County. Big Brother to the Little Scrubgrass plant—the first of its kind—and the more complex Slippery Rock plant, below, will neutralize some 2 million gallons a day of acid mine drainage. Cost of this plant, designed by Chester Engineers in Philadelphia, will be around $102,000. It should be in operation within six months.





MINES SECRETARY H. B. Charmbury (under arrow) describes the "Operation Yellowboy" portable laboratory to members of the Sanitary Water Board and the Federal Water Pollution Control Agency on tour of the bituminous region last summer. Portable facility affords the Department as well as coal industry with pertinent facts needed prior to ultimate construction of more permanent treatment facilities at given site where used.

—have been observed flourishing several miles downstream from the plant itself.

But "treatment is not the answer to the problem," according to Dr. H. B. Charmbury, Secretary of Mines and Mineral Industries.

"Scrubgrass was our first venture—and it is successful—in what I call our one-two punch on this problem," Dr. Charmbury says. "Permanent remedial action to eliminate the sources of pollution has to be the ultimate objective, but semi-permanent treatment plants enable us to reclaim or protect the streams from mine drainage until we can get to the sources, backfill and/or otherwise eliminate them."

"At sometime in the near future," Dr. Charmbury says, "we will strike or disassemble the Little Scrubgrass plant and move on to another location in the State and start the cycle of reclamation all over again. But we won't move the plant until we're sure that our restoration work has eliminated the source of pollution."

Late in the fall of 1968, the Department of Mines and Mineral Industries, using its own equipment and personnel, completed restoration of the 27-acre abandoned strip mined lands and pit on the Rankin property.

But before the Department could begin work at all, the property had to be purchased from Rankin and turned over to the Commonwealth as public land. To enable the Department to purchase such lands for restoration, the Legislature passed what is known as the "Coal Lands Improvement Act" in 1965, and appropriated $1 million to the Department of Mines for just such purposes. The Rankin property was the first purchase under this Act.

Under provisions of the Act, the Secretary of Mines and Mineral Industries is authorized to acquire, either amicably or by condemnation, land which has been affected by open pit or strip mining and which, in its present state, is hazardous or otherwise detrimental to the health and safety of the citizens of the Commonwealth, for which Federal and/or State funds are available.

The Secretary is authorized to backfill, plant and perform other acts of restoration on the land. After restoration the Secretary may transfer jurisdiction of the land or any portion thereof to any other state department or state agency as can best utilize it for public purposes.

If such retention is deemed impractical, the Secretary may sell such land to counties or municipalities at the cost of acquisition and restoration or at public sale to the highest



THIS PORTABLE "fire engine" type lime neutralization plant is one of three that the Department of Mines and Mineral Industries employs for emergency purposes. This plant pictured is mounted on a trailer and can be transported to a specific acid-ridden abandoned strip mine pond, neutralize it with lime, before more permanent restoration takes place. One shown above is neutralizing abandoned strip pit on Rankin Property above Little Scrubgrass.

bidder, but this is considered a "last resort" in disposal. A condition of the sale is that no open pit or strip mining shall be allowed on the property thereafter.

Land for which a bond conditioned upon restoration thereof is in effect shall not be acquired under the Act. Also, the Act can not be construed to relieve any person from an obligation to backfill, plant or perform other restoration required by law.

"We'd prefer, however, that local communities or governmental units purchase such lands for reclamation," Dr. Charmbury said, "because it saves time and effort. Even though we have competent people assigned to handle provisions of this Act, their individual efforts are taxed

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NEW LIFE—



LITTLE SCRUBGRASS CREEK lime neutralization plant, upper Butler County that was the first of its kind in the country when it went into operation in December of 1966. The Department of Mines and Mineral Industries reports that this plant—installed for less than $40,000—has restored this tributary of the Allegheny to the point where it once again is supporting aquatic life.

considerably by mounting requests from local government entities.

"If a county, or municipality can acquire the land, it can speed up the total reclamation effort by sometimes as much as a year or more. It takes a great deal of time on title research and correspondence with the individuals who own these tracts before papers can actually be signed. This is a major headache to us, operating out of Harrisburg with so many different requests. It amounts to tremendous time saved when local government can accomplish purchase of such lands, and then allow us to do the necessary reclamation work.

"If a local government entity owns it beforehand, then it eliminates the need for the research and ultimate disposal of the land once it is restored," the Secretary said, "and this, too, can be a problem."

In addition to Little Scrubgrass, the Mines Department has since received bids on two more "Scrubgrass" type plants, one to be built at Sandy Run in Luzerne County and the other at Buck Mountain in Carbon County.

When these two new plants are operational late this summer they will—combined—clean up nearly 12 miles of abandoned mine water pollution affecting the Lehigh River.

Other acid ridden streams of the Commonwealth are beginning to receive direct benefits from the Department's comprehensive reclamation efforts.

Now under construction at Burgettstown in Washington County, is the nation's first ion-exchange type mine water treatment plant. When finished sometime this year, this plant will provide that community with an additional 500,000 gallons of nearly pure water for its existing Dinsmore water supply reservoir. In nearby Butler County, a huge, more refined neutralization treatment plant is also being constructed to protect Slippery Rock Creek from periodic "acid" slugging. This plant will also be operational later this year and clean up nearly a million gallons of mine drainage a day.

Under terms of the recently enacted conservation bond issue, the Department plans to utilize some $150 million of its $200 million allocation from this source, to further implement work and programs designed to clean up additional abandoned mine water pollution sources.

Governor Shafer authorized the Department early last year to initiate basinwide surveys on seven major Pennsylvania watersheds to determine both the sources and steps necessary to erase mine drainage pollution. These include the Youghiogheny in Fayette and Somerset Counties; the Chartiers Creek in Allegheny and Washington Counties; the East Branch of the Clarion River in Elk County; Slippery Rock Creek in Butler County; Beech Creek in Centre County; Two Lick Creek in Indiana County; and the Mahantango River in Schuylkill County.

All of the surveys are underway, Dr. Charmbury said, and one of them—the Youghiogheny—is nearly completed. "From the Youghiogheny survey," he said, "we already know that there are over 500 different sources of mine drainage pollution alone affecting this watershed.

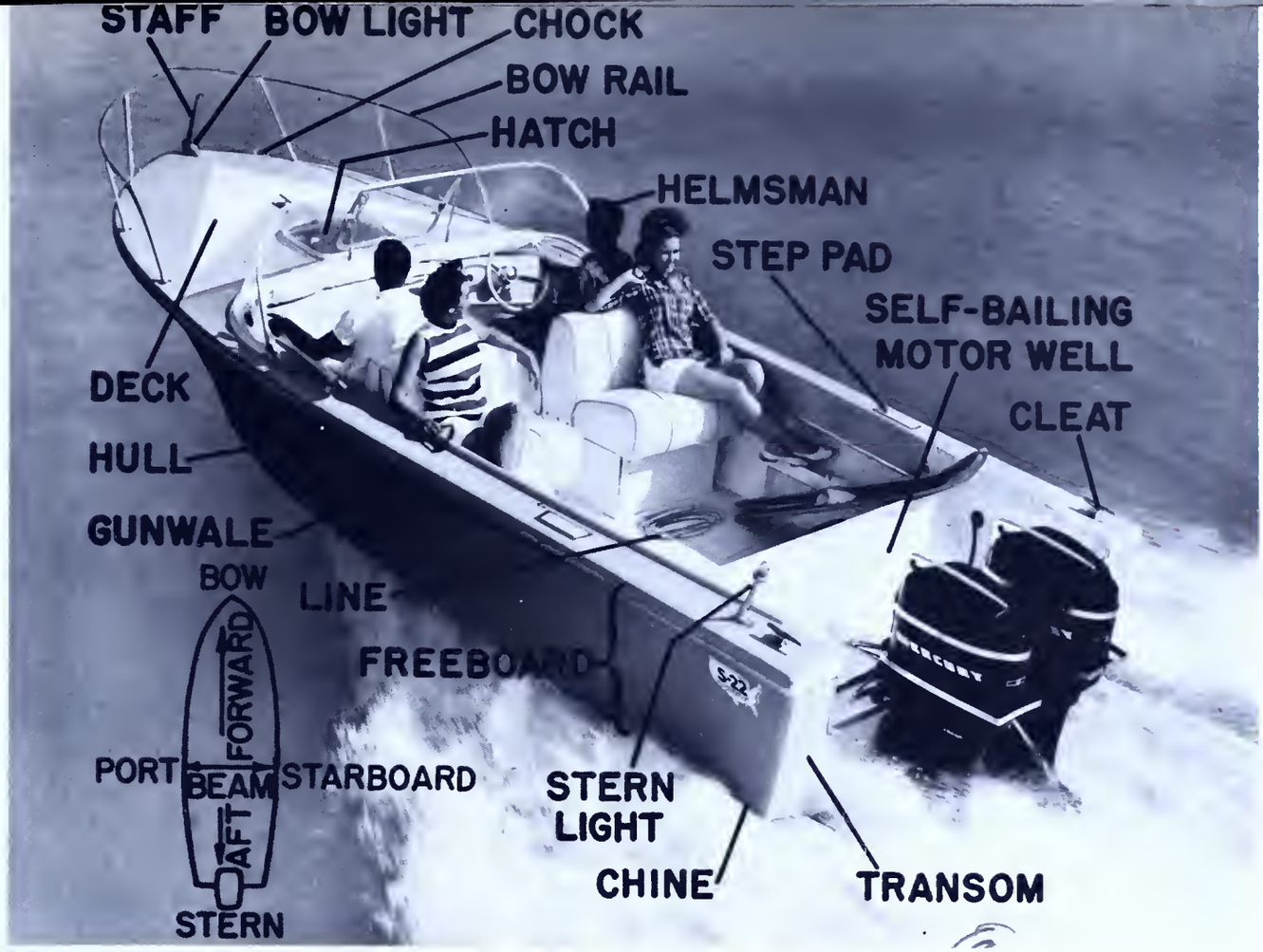
"What we're determining now are the quick-start projects that can be undertaken on the Youghiogheny to eliminate as many sources as possible and as soon as possible with bond issue financing."

Aiding the Department's temporary efforts at stream recovery are four portable lime neutralization type plants that Dr. Charmbury calls his "fire engines." "These portable plants can be dispatched to given points in order to protect a stream from a wholesale acid slug or they can be employed to temporarily relieve mine drainage conditions until more permanent facilities are erected on-stream. (See photo.)

Realizing that treatment to neutralize abandoned mine drainage can be costly if done over a long or extended period, Dr. Charmbury defends this procedure with some rather sound logic. "Until we know where the sources are, and what to do to eliminate them, the Department feels that treatment of abandoned mine drainage can offer temporary—but at least immediate—relief.

"Since there are approximately 3,000 miles of Pennsylvania streams and rivers polluted by abandoned mine drainage and extending back to the very dawn of coal

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BOATER'S JARGON/

by Steve Butchock

THOSE AMONG THE "IN" CROWD in boating are hep with its jargon. In casual conversation, chock, cleat and chine are terms that won't stump the knowledgeable recreational boater.

From personal observation of novice and veteran boatmen alike, all too many aren't as proficient with the jargon as they are at the helm.

Eavesdropping on a chat between a boater and a marine dealer one muggy summer day, certain colloquialisms mentioned by the latter left a wide gap on the visitor's face. At the same time it exploited a general deficiency: most boatmen aren't the skillful boating connoisseurs they think they are.

The visitor—a dignified man who spoke with a fluency that it was hard imagining him being anything but a successful professional in the business world—declared an interest to "trade up" to a larger outfit.

"I have a 15-footer," he told the dealer. "It has a 45. I'd like to get an 18-footer with an 80." At this point you'd vow he was an "in" boater.

The dealer pointed out a reconditioned 18-footer resting on a tilt trailer outside his showroom. "Gunwale length is 18 feet. Is this alright?" Strange wrinkles crossed his face. The visitor's status as a disciple of the "in" crowd already was in jeopardy.

But he replied gamely. "You mean straight from the bow to the stern," he remarked. This clinched his status; the pot-shot wasn't "in" talk.

"No, around the upper hull safety strip," explained the dealer, sweeping his arm alongside the craft. Now the explanations seemed to bewilder the man all the more.

"Any other questions?" inquired the dealer.

"Not particularly," answered the man. "Hull and deck look okay. But there's a slight crack in the starboard reflector." With this his confidence rose. So did the dealer's.

"What about the motor?" asked the man.

"It's not the best," retorted the dealer. "With the loads you'll be carrying, you'd be better off getting a new one. But I don't have any that'll fit."

"There's an 80 in the showroom," countered the man. "It's not sold, is it?"

"Nope, but it's a short shaft."

"Then order me a long shaft," the man shot back.

Both men smiled. Both men were obviously at ease. It's a comfort engaging in conversation when you know the jargon. And with some study of the picture (top of page) you too can learn what those different terms mean!



CAN YOU IMAGINE how happy the owner of this piece of property was when he found several boxes of garbage which had been deliberately tossed out. But whether that "left behind" rubbish is intentionally discarded or not, the effect on the property owner who has to pick it up is the same—close the ground to public use.

The Alarming Cost Of POOR STREAMSIDE MANNERS

by
JIM YODER

WHILE GENERALLY RECOGNIZED as definitely disgraceful, and just one more of those things that "something should be done about," I wonder how much recognition is given to poor streamside manners and the littering associated therewith as a major threat to further diminishing the amount of water open to public fishing—a threat which may very well be second only to pollution.

The magnitude of the litter problem elsewhere is graphically illustrated by readily available statistics from a number of agencies intimately concerned with its prevention. Our Pennsylvania Department of Highways estimates an annual expenditure of $1,000,000.00 for litter removal along our Commonwealth highways alone. Keep America Beautiful, Inc., the national litter-prevention organization has rather colorful statistics to match any given occasion. For example, on a Memorial Day spree, this affluent society of ours will carelessly lay an ugly "wreath" of litter (as their memorial to the Nation's beauty) equivalent to a

3,800 mile band, two feet wide and four inches high, circling through Minnesota, Ohio, Texas, and Wyoming! The Fourth of July will leave behind enough litter to pack a firecracker taller than the Empire State Building while the long Labor Day weekend will require approximately 4,000,000 man-hours of labor in refuse removal!

Closer to home, the Pennsylvania Fish Commission's Enforcement Division reports a 100% increase in arrests for littering offenses (1968 over 1967) as compared to an increase of 20% in arrests made for fishing without a resident fishing license—the most frequently violated provision of the Fish Laws. It would appear that things will get worse before they get better.

Any landowner who has found not only the stream banks, but his lawn and farmland as well, littered with everything from SOUP cans to NUT bags (bottles are in there—although not alphabetically) will attest to the alarming fact that the situation is getting downright intolerable. Each year these patient hosts entertain countless thousands of sportsmen, expecting (and *getting*) nothing in return for their hospitality. It would seem that at least the common courtesies extended a host elsewhere would prevail here. But instead of "thank you," he gets cans, bottles, ruts in a cultivated field, a burned tire here and there. He loses a goodly number of Christmas trees each year, not to mention the lower-most branches of his most colorful red maple—which didn't burn anyway, judging from the ashes of the fisherman's campfire!

This thoughtless behavior runs the scale from the innocent tossing of an empty cigarette pack; ridding one's self of a monofilament birdsnest, through rubbish, campfires left burning on up to outright vandalism! One irate Potter County landowner, contemplating building a camp, began hauling in materials. Among them was a heatilator, the nucleus of his dreamed-of fireplace. It didn't take an Indian guide to read the sign—a pickup was backed up, the unit loaded and hauled away. Beer cans and empty cartridge packs were left in its place. His first thought was to lash out at sportsmen in general and close the land. Fortunately, such action (although justified) would have been against his principles.

A very good friend of mine owned a section of land bordering prime trout water in Luzerne County and for years smiled as he hauled away one wheelbarrow after another of litter after trout season's first month had passed. He tells of observing a young woman eating her lunch. When she had finished, her pop bottle was tossed out the window right on his lawn. Always the gracious host, he walked over and asked her if she would be kind enough to pick it up and put it elsewhere. Very obligingly she retrieved it, walked over to one of his flowering shrubs and neatly secreted it at its base! One of the most patient men I've known—even he had a limit. While this incident was not the straw that broke the camel's back, continued abuse brought about the closing of this section to public use. Only a section you say? In many areas of the state the only water available for public fishing barely meets Commission standards (with regard to length) and ANY posting within the limits of this stocking can remove it from the stocking list. Accurate figures are not immediately available, but it would seem safe to estimate that 75% of the public fishing available throughout the state is dependent on the patience and sufferance of private landowners—LET'S NOT PRESS OUR LUCK!

Littering—disgusting as it is, is but one phase of a landowner's problems, although it's generally the end result of other poor behavioral practices. The building of fires along shoreline areas is fast becoming a major problem throughout the Commonwealth. Arriving much too early for opening day, it seems to be the natural thing to do—much to the distress of the landowner. Probably one of the most extreme examples on record anywhere occurred last year on Cooks Creek, in Bucks County.

By lunch time, April 12th (the day *before* trout season) four tents had already been pitched at the Route 412 bridge crossing. By 5:00 P.M., 25 or more cars were parked in the immediate vicinity of this bridge and an estimated 100 people were gathered—waiting for the opening hour—12 hours away! Eleven P.M. found cars parked in every available spot along a half mile section of roadway. Earlier in the afternoon, Springfield Township Chief of Police Alex Chaser had posted this area against parking to assure access to a lane leading to three homes along the creek. The "NO PARKING" signs disappeared—evidently used as firewood—there were 35 campfires burning in early evening and an uncountable number later as the chill increased. Pressed by the urgency of his regular police duties, he was unable to remain in the area with the situation getting out of control by leaps and bounds. One young teenager was halted in the act of chopping down a tree with an axe his dad had told him to take along—in case it got cold and he wanted to build a fire! Trees had been chopped down, others just hacked with permanent scars and left standing. Litter of an inglorious variety was everywhere; bottles, cans, papers, trash of every description was strewn in all directions. A day or so later Boy Scouts succeeded in filling two pick-up trucks with refuse left from opening day. (This is reminiscent of a day on Harveys Lake when volunteers from their Rod & Gun Club and PFC personnel likewise removed two pickup truckloads of litter from one section of the lake alone—all left behind by thoughtless ice-fishermen!) The Cooks Creek incident is probably singularly responsible for the establishment of the new opening hour for trout season this year—8:00 A.M. Perhaps this will entice more of these folks into remaining at home in the comfort of a warm bed rather than spend all night harassing their neighbors.

There are many things in this life I've never been able to comprehend—but I've accepted them. The splitting of the atom is just not too clear to me at even this late date; moon shots and the like are just not my bag, but when it comes to keeping warm by the fireside, I feel I can speak with reasonable authority. Here and now I would like to take exception to those birds who insist on burning rubber tires to keep warm while fishing! Great Balls of Fire it escapes me how these folks figure the heat is worth the billowing putrid black clouds of smoke! One of the rewards of a day in the great outdoors is the fresh air

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POOR STREAMSIDE MANNERS

—it can make up, in some measure, for getting "skunked." Personally, I'd rather freeze than breathe stinking fumes from a burning tire. More disgusting (and lasting) than the smoke is the coiled wire carcass left behind when the rubber has burned away. Eventually, this too finds itself in the stream bed to later foul hooks and trip wading anglers!

Thus far, we've not broken down our amicable hosts into categories more specific than "landowners." Let's consider, specifically, the plight of the farmer. A very good little trout stream in Northeastern Pennsylvania, one which would meet Commission standards for stocking (and if stocked—would provide trout fishing in an area where such is not otherwise available) has been closed for years because of the stand taken by one farmer situated just about in the middle of its length. I had a good long chat with him and left fully sympathetic with his problem. "I have *never* chased a fisherman out of that stream, and I don't intend to. It's the fellow who walks the banks—well, not the banks *but my wheat field*—'looking' for a 'good' spot to fish that provokes me! Year after year I lose a swath of grain, six to eight feet wide from the hordes of fishermen who walk the *fields* in full fishing attire, hip boots or waders, rod and creel—and fella', those trout just aren't in the field!" It is doubtful this stream will ever be open to public fishing throughout its entire length because of the continuing abuse in this one section. A similar situation exists in another location where the farmer/owner has the misfortune of having the watercourse flowing in a gentle arc around his corn field. He loses a few bushels of corn every year to those who will not stay with the stream.

Broken bottles probably cause the streamside farmer more anguish than any other single item. Pity the farmer located not only along a stream, but a public highway as well! We must admit that the blame for an awful lot of garbage thrown from passing vehicles is laid to the fisherman—nevertheless, the damage is done. One of the most productive sections of Fishing Creek in Columbia County was lost to public fishing for a number of years because of a broken bottle. While spreading manure near the highway adjacent to the creek, where fishermen park, he ran over a broken bottle, cutting and ruining a tire. He wasn't too shaken by the incident until he found it would take a number of weeks to replace this particular size tire for his spreader—it had to be ordered from out of state! The manure pile and his wrath mounted proportionately day by day. Harvesting machines have been known to pack broken glass into bales of hay and straw and when not detected by the dairyman before feeding—he's got a problem on his hands, and he may still not have recovered from the broken fence he noticed the day after the season opened!

The anti-litter writer has at his disposal a great abundance of material, but what an empty feeling it leaves. Staggering statistics are available, as aforementioned, to fill an entire page. Littering has no doubt engendered more slogans than Prohibition and the great wars—but the problem remains. Where does it all start? That's the easiest part of the whole matter—with *you* and *me!* A gum wrapper, cigarette package, a single can or bottle—think of it, A HUNDRED MILLION OF ANYTHING MAKES QUITE A PILE!

But stopping it—that's another matter. Why doesn't it just stop? Quoting KAB again, "—people are thoughtless. They don't realize the staggering amount of litter that accumulates or the cost and effort of removing it. They don't feel responsible for the appearance of public property. There are other reasons, too. Increased travel, expanded facilities for recreation, a shorter work-week with more time to enjoy America's great outdoors—all combine to provide more opportunities for litterbugs and add up to a tremendous national problem!"

It's going to take immediate personal *and* organized action on the part of outdoorsman to get the litterball rolling in the opposite direction—we've talked about it long enough! Just how to go about it in an organized fashion is not as difficult as it may seem. KEEP AMERICA BEAUTIFUL, INC., has a wealth of manuals, guides, and leaflets, available. For a complete listing—and some good ideas—write them at 99 Park Avenue, New York, N.Y. 10016.

Some years ago a writer called us, "—a nation standing knee-deep in sewage, gazing skyward at rockets bound for the moon." While the litter is still but ankle deep along the shoreline—let's "move it out."



"JUST TOSS IT OUT THE WINDOW . . ."

A SCIENTIFIC STUDY—

TROUT FISHING TYPES

by L. JAMES BASHLINE



TWENTY-FIVE YEARS OF ANGLING EXPERIENCE has caused my path to cross with many fishermen. I've enjoyed them all—in fact it seems as if the fishermen are becoming more interesting than the trout at times. It's really too bad that more psychoanalysts are not trout fishermen. They could have a ball fitting the various angling types into the many mentally disturbed categories.

In a small way this is exactly what I have done. After much deep thought (and many ill-spent hours on the stream) I have managed to type the normal, abnormal and subnormal species of trout fishermen. To my knowledge, nothing this scientific has ever been attempted before where trout anglers are concerned. ANGLING widows

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LEAH HOSSLER, one of the family, sports crappie caught while on family fishing trip.

FISHING *The Family Sport*



by
SAM HOSSLER

AUTHOR SAM HOSSLER gives son Scott a lesson in handling new spin/cast gear. Balanced and good quality equipment is important for those members of the family just getting started. Poor or improper gear can cause lots of needless frustration and grief and ruin an otherwise pleasant trip.



YOUNG LADY ANGLER Debbie Brennan gets some casting instruction from Jack Welsh of Jacobs Sporting Goods Store in Monroeville. Fifteen minutes later, she was making 20 yard casts by herself.

THE ONE OUTDOOR ACTIVITY in which the whole family can participate is fishing. Grandparents or toddler —each may enjoy this healthy, relaxing form of recreation. Every year many families are discovering the joy of sharing a day on the water together. Whether it is sitting on the bank of a river, boating on a placid lake or wading a secluded mountain stream in search of the wily trout, family fishing will double the pleasure derived from this wonderful sport. Many men for some reason assume their wives and daughters are not interested in dunking worms from a stream bank. The truth of the matter may be they have never been invited to try. I have never found many females, young or old, who enjoy impaling a worm on a hook but this is a small price for the man of the house to pay for the excitement and delight seen on their faces when that first strike puts a bend in the rod and the fish is hooked and landed. Girls, boys, wife or sweetheart all will enjoy learning the art of angling.

When taking the little ones—or for that matter anyone new to fishing—out for the first time try to pick a spot where they will catch fish, any size fish. The first bluegill, crappie or perch is a memory they will keep with them forever. If they can catch a few the first hour out they'll be a fisherman for life. The thrill they receive will be transmitted to you through their shrieks and laughter as they battle their prize.

A picnic fishing trip is always a big event at our house. With the many state and county parks scattered throughout Pennsylvania we have our pick of any type of fishing within easy driving distance. Many of the larger lakes have boat liveries and all on which public boating is permitted have access ramps. Picnicing may be enjoyed at all parks and the scenery and fresh air will soon melt your troubles away.

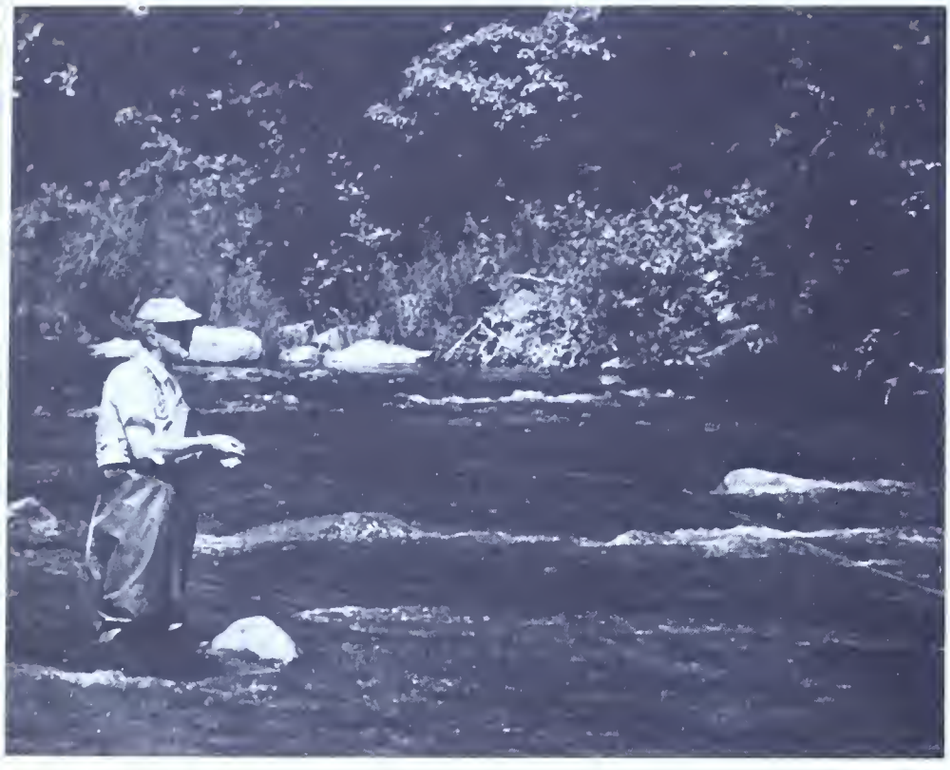
Another fact in favor of fishing is its cost. The least expensive of any of the sports, it offers much more in return. Excellent balanced beginner fishing sets are marketed by many leading manufacturers with a price range of $4.50 to $12.00 at most sporting goods stores. These include rod, reel and line. A package of hooks, some sinkers, and a bobber or two will complete the outfit and the price will still be less than a dozen good golf balls. A well balanced outfit will be easier to learn to use and will give many years of carefree fishing, while the toys are just that and should be avoided. My only advice would be to stay with the spin or spin cast types. The less expensive bait casting reel will create more frustration than pleasure and could cause even a veteran fishermen to give up the sport.

Fly fishing is a great challenge and as your pupil becomes more proficient he will want to try this I am sure. Many old time fly fishermen would have you believe it is only after many years of practice are you able to present a fly that will fool a trout. However, bluegills and crappies aren't so fussy about the presentation and many happy hours can be spent learning to cast and at the same time catching fish also. On a light fly rod a crappie will give the novice angler as much action as he can handle. Ounce for ounce they will give you as scrappy a fight as any fish that swims.

The many fringe benefits that go with fishing can not be overlooked either. All the wonders of nature unfold along a stream or on a lake and may be enjoyed by everyone. Ducks flying overhead or the glimpse of a great heron as he effortlessly flaps away are thrills not only to the youngsters but adults as well. There are many animals to be seen also. Deer, raccoons, muskrats and even the frogs and turtles are a source of excitment and interest to children. In the spring grouse may be heard drumming or the whistling of a woodcock at twilight as he does his courtship flight. These are the things to be shared together, they are what make the "unforgetable trip."

More and more people are learning to enjoy nature by simply observing it, which is something the whole family can do while fishing. Try it, you may find new fishing pals you didn't know you had!

by CHAUNCY K. LIVELY



THE MARCH BROWN

MUCH CAN BE LEARNED about a trout stream by examining the extent of aquatic life on the stream bottom. Overturning a submerged rock or two—or scooping up a handful of gravel—will often indicate a stream's fertility by the quantity of nymphs found. On the other hand, the absence of nymphs means that the stream is probably infertile or perhaps polluted to a degree sufficient to eliminate the more delicate forms of aquatic fauna. A knowing fisherman will look for nymphs with obviously darkened wing cases, for these are the nymphs he can expect will soon be active and possibly emerge later in the day. Armed with this knowledge he can often predict the "hatch of the day" and make his choice of fly accordingly.

Among the more common mayfly nymphs inhabiting the riffly waters of Pennsylvania's trout streams are those of the genus Stenonema, which includes the familiar March Brown, Cahill and Gray Fox or Ginger Quill. Stenonema nymphs are relatively broad and flat, designed by nature to be able to cling to the underside of rocks in medium to fast current. These nymphs have characteristically broad heads, with eyes positioned on top, and rather large, mottled legs.

The March Brown nymph pattern shown in the photographic sequence is the result of a long evolution of subtle changes from the original condor quill pattern which we first described in the May, 1953 issue of the ANGLER. Some of the changes were made to improve durability, others to enhance the likeness of the artificial to the natural. The pattern begins with a basic underbody, made by cementing a strip of heavy nylon monofilament on either side of the hook shank and tapering each toward the rear with a razor blade. This provides the required shape and flatness so characteristic of the natural and may be used as the basis for making any flat-bodied nymph. The nymph may be self-weighted by substituting strips of lead wire for the monofilament.

A single fibre from a dark condor quill is an ideal material for the nymph's abdomen for it is tough, self-segmenting and the wispy flue on the edge of the fibre imitates the gill filaments of the natural nymph.

The big head, so prominent on the living nymph, is achieved by folding the quill extension of the wing case up and back, over a piece of chenille to give it depth.

Stripped hackle ribs are used for tails because of their extreme durability and because their natural curvature permits easy positioning on the hook. Care should be taken to avoid the use of ribs from large hackles for these are generally too clubby and stiff to be practical. Ribs from the smaller spade hackles are finely tapered and when soaked, in use, become soft and flexible.

Because of the general similarity of the March Brown nymph to smaller relatives of the Stenonema clan, the pattern in size #14 is also effective when Cahills and Ginger Quills are prevalent. Like any imitative nymph, it works best during the emergence period of the naturals and in Pennsylvania this generally falls between mid-May and early July, depending upon geographical location.

TO TIE A MARCH BROWN NYMPH:

STEP ONE—Prepare a flat underbody by cementing a strip of heavy monofilament on each side of the shank of a size #12 hook. With a razor blade slice the nylon to a taper toward hook bend. Tie in brown nymph thread behind eye and spiral closely to rear of underbody. Half-hitch.

STEP TWO—For tails strip the fibres from three small brown spade hackles. (These are located along the sides of the neck.) Tie in stripped hackle ribs at rear of underbody and spiral thread forward to midway point along hook. Trim off excess hackle ribs as shown.

STEP THREE—Select a single dark condor quill fibre and bind tip end on hook with butt end extending over tails. Spiral thread over quill fibre back to base of tails and forward again to mid-hook. Saturate all thread on underbody with thin outdoor lacquer.

STEP FOUR—Attach hackle pliers to butt of condor quill and wind forward, being careful to avoid overlapping turns. Tie off butt of quill with two turns and half-hitch.

STEP FIVE—For wing case cut a section of dark gray goose quill slightly wider than body of nymph. Lay quill flat over body with shiny side down and tie in tip end over condor quill tie-off. With bodkin point spread a thin coat of vinyl cement on both sides of goose quill and trim away excess tip.

STEP SIX—Invert hook in vise. For legs cut six fibres from a large, brownish wood duck flank feather. Tie a knot in each, near the middle of the fibre, forming a right angle as the knot is pulled tight. Bind legs in pairs to underside of body, as shown, and spiral thread back to edge of condor quill. Apply a small drop of lacquer to each leg knot.

STEP SEVEN—Trim legs to proportions shown in Fig. #10. Apply a medium-heavy dubbing of tannish gray Cross Fox fur to about 2″ of the tying thread and wind dubbing forward, taking care to avoid altering the position of the legs. Half-hitch thread behind eye.

STEP EIGHT—Turn the nymph right-side up in the vise. Pull wing case over the back of the dubbed thorax and bind to hook with two turns behind eye.

STEP NINE—Cut a 2″ length of medium-diameter dark brown chenille and lay chenille over goose quill where quill was bound to fore end of hook. Hold chenille in position and bend goose quill up, back and over chenille. Bind down quill just behind chenille with two turns and half-hitch. Trim away excess quill close to windings. Cut off ends of chenille snug against each side of head and apply a drop of vinyl cement to ends of trimmed chenille to prevent unraveling. Move thread forward to eye of hook, whip finish and saturate finish windings with lacquer.

STEP TEN—Completed March Brown nymph.



STEP ONE



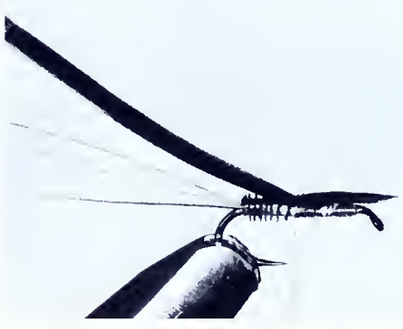
STEP TWO



STEP THREE



STEP FOUR



STEP FIVE



STEP SIX



STEP SEVEN



STEP EIGHT



STEP NINE



STEP TEN



THESE FIVE HAPPY FISHERMEN could all be dead in darned short order if that rowboat they've overloaded upset! While early spring is a great time to get outdoors, anglers—and other boaters—should remember that the water in Pennsylvania's streams and lakes can be very cold—and hazardous.

IF YOU'RE ONE OF THOSE BRAVE FOLKS WHO DON'T MIND PUSHING OFF WHEN THE WATER TEMPERATURE OF YOUR FAVORITE RIVER OR LAKE IS ON THE LOW SIDE, THEN PERHAPS THIS STORY WILL GIVE YOU SOMETHING TO THINK ABOUT. AN UPSET INTO THE COLD SPRING WATER COULD BE FATAL—AND ONCE YOU'RE OVERBOARD YOU DON'T HAVE MUCH TIME TO DO ANYTHING ABOUT IT!

by C. JAMES HARPER JR.

COLD WATER— THE QUICK KILLER



ON THE SECOND SATURDAY IN APRIL, trout fishing season starts in Pennsylvania. The average water temperature across this state will be 40° Fahrenheit. How long can you live in 40° F water? How long can you swim in water that temperature? What are your chances of survival if you fall overboard?

Most people are aware that cold water kills a person faster than cold air. But very few people know just how fast cold water kills. I was only seventeen and aboard ship in the Bering Sea when I learned what cold water could do. The ship's Captain announced that the ship wouldn't be turned around to pick up anyone washed overboard. The Captain explained that a person couldn't live long enough

AN UPSET in the summertime when water is warm is far less dangerous than spills in cold water. However boaters should be prepared for upsets all the time. Life saving devices should be available for all on board although they are not legally required in non-powered craft.

in that water for a ship to turn around and race to their rescue.

In Pennsylvania, duck hunters and fishermen push off from shore in overloaded car-top boats in water just as cold as the Bering Sea. The only difference between fresh water and salt water is that fresh water freezes at 32° F and salt water about 4° less, approximately 28° F. Men who wouldn't dream of venturing on deck of a large ship in the Bering Sea, push off from shore in the lakes and rivers of Pennsylvania with complete abandon, unaware of the possible danger they may encounter, and in small craft which can be easily upset.

Of the several hundred reports on shipwreck survivors in the files of the Bureau of Medicine and Surgery, U.S. Navy, Washington, D.C., very few show survivors in water temperatures under 40° F. One outstanding case recorded is that of ten men who were cast adrift when their vessel was torpedoed. The water temperature was 29° F. A rescue ship arrived thirty minutes later. Nine of the men were dead. One survived. Most of the men died shortly after being immersed. The one who survived is a record for 29° water.

How do some men manage to stay alive in cold water? Why do most of them die, and what is the cause of death? These questions have puzzled scientists and military doctors for years, and for many years they have been searching for an answer. Let's review the history of this research and determine what man has learned about survival in cold water.

In 1880, a Russian author, Laptschinski, conducted tests in cold water and was the first to propose the method of rapid re-warming in hot water of an individual who was suffering from cold water immersion.

Professor G. A. Weltz, former Professor of Roentgenology at the University of Munich, was assigned to investigate exposure to cold water immersion in 1940. The German Luftwaffe's interest was aroused during the Battle of Britain, when a good many pilots who "ditched" in the English Channel were lost in the cold water. Dr. Weltz re-discovered Laptschinski's theory of rapid re-warming. He found that rapid re-warming in hot water of 115° F was lifesaving in guniea pigs and pigs that had been chilled to the threshold of death. Another important result of the experiments in regard to preventive measures against life-threatening chilling in cold water is that it is better to salvage warmth than attempt to produce warmth while immersed. A practical fact told to him by German Navy people is that after immersion in cold water following shipwreck, engine room personnel generally did better than deck personnel, even though they were less well-dressed. He feels that the engine room personnel probably hold their "pre-heated" state for a considerable time in contrast to the deck personnel who had been in the cold air all along. Dr. Weltz's advice to people who find themselves in cold water is to move as little as possible and be dressed warmly, even keeping their gloves on. He advised getting as much of the upper torso out of the water as possible by getting on top of floating debris, a raft or an overturned boat.

Dr. S. Rascher, a member of the medical staff of the German SS, conducted experiments on shock from prolonged exposure to cold water on human beings. These experiments were carried out at the Dachau concentration camp from August 15, 1942, to February 12, 1943. Heinrich Himmler, who fancied himself somewhat of a scientist, took a very active personal role in organizing and planning the experiments on human beings.

Most of Dr. Rascher's prisoners were Jews along with a few Catholic priests from Poland. In most cases, they were dressed in the usual flying equipment of aviators, including a life jacket consisting of rubber or kapok. In other cases, they were naked. Rectal temperatures and skin temperatures were recorded. The water temperature varied between 35° F and 53° F. Ice was added to the water to maintain desired temperature.

When subjects were pushed into the water, they let out an agonized scream and showed a marked chill. Especially painful was the chilling of the neck and occiput (the lower back part of the head). In five minutes, the arms started to become rigid in a flexed position pressed against the body, followed by the rigidity of other muscles. After ten minutes, there was a definite lowering in the intensity of perception of pain. Rapid jerky convulsions began and speaking became difficult because the rigidity extended to the muscles of speech. Then a marked inhibition of breathing made its appearance followed by a profuse oversecretion of mucus. Vesicular foam formed around the mouth. After twenty minutes, the frequence of respirations began to drop. Consciousness became clouded. Pupils became dilated. The gaze was fixed upward. The heart action showed constant and characteristic changes which were the same in all experimental subjects. The heartbeat became irregular gradually developing into a slow type irregularity that ended with a sudden standstill and a fatal outcome.

Dr. Rascher found the timed sequence of events varied very little between subjects. An initial delay in the drop of the body temperature was noted in some subjects. He found that the speed of loss of warmth is dependent upon certain individual factors, such as the general physical condition of the subject, the subject's position in the water and

continued on next page



WATER SAFETY and the proper use of life saving devices is explained by Chief Marine Services Specialist Dean Klinger.

continued from previous page

THE QUICK KILLER

the type of clothing worn. Emaciated people as well as youthful or naked individuals lost their warmth more rapidly than others. He observed that subcutaneous fat on the body delays chilling but also delays re-warming.

When experimental subjects were anesthetized before being placed in the cold water, they groaned and made defensive movements. After five minutes, their movements ceased and increasing muscular rigidity appeared, especially in the muscles of the arms. This rigidity continued until just before death, then the body relaxed. Once the body relaxed, no method of resuscitation was successful. It was observed that when the neck and occiput were submerged in the cold water, the loss of body temperature was greatly accelerated.

Various methods of re-warming the body were tried; drugs, hot fluids and alcohol with varying success but the German SS doctor found that the fast re-warming method of putting the men in hot baths was most successful. No harmful effects were noted in any of the experimental subjects. The use of alcohol was discouraged as a re-warming agent because the heart continued to beat irregularly for about two hours after the subject was removed from the water. Alcohol can be used as a re-warming agent if it is administered to people who are immersed for a very short period of time, before heart irregularity develops. In cases of long period immersion, it can be given only after the heartbeat returns to normal. Alcohol was also found to accelerate the loss of body heat if administered before immersion. Rubbing the skin to stimulate circulation was also found to be harmful to frozen tissue.

Daily test records from Dachau were destroyed and only the final report in Himmler's files were found. This report lacked the precise data that scientists require. The height and weight of only five subjects were listed. Even the total number of subjects tested was omitted.

In 1946, G. W. Molnar, Dept. of Physiology, University of Rochester School of Medicine, examined several hundred shipwreck survivor reports filed during World War II. These reports originated from ship doctors or the pharmacists mates on duty aboard U.S. Navy ships from April, 1942 to April, 1945. These reports included men picked up from the U.S. Coast Guard, U.S. and foreign merchant ships, German and Japanese naval vessels and Army and Navy airplanes which were ditched at sea.

The purpose of this study was to establish more precisely the relationship between duration of immersion and sea water temperature. The only reports that were used were those that showed the exact duration of immersion in which men were continuously covered by water to the neck or shoulders. The sea surface temperatures and type of clothing worn were also noted. This data was then analyzed to estimate maximum survival times in various water temperatures. Survival charts were then drawn up showing the maximum survival time known. In many instances, it represents the sole survivor as in the case of the ten men cast adrift in 29° water, one survived. (See Fig. I)

Case after case told of unconscious men, gasping for breath, many with irregular heartbeats, being pulled from the water by Navy personnel. Some of the survivors who held onto rope couldn't let go, and rescuers had to cut frozen rope to release them. When the rescued became conscious, they complained of temporary numbness of the hands and feet. It is worthy of note that after these men were placed under warm showers and put in warm beds, fed hot soup and coffee, they were able to return to duty in forty-eight hours. These men didn't suffer any subsequent ill effects including respiratory infections.

A vast majority of these shipwreck victims did not live as long as the Dachau prisoners in water temperatures under 50° F. This may be as a result of high seas and the role that shock must play in sudden immersion.

John F. Hall Jr. of the Aero Medical Lab., Wright Air Development Center, tested the cooling rate of the extremities (hands and feet) in 1954. Hall found that a person's ability to produce heat was based on their metabolism rate. He found that persons who started to shiver as soon as they were put in the water increased their metabolic rate sooner and therefore were better able to withstand the cold water longer.

I talked with Mr. Hall about his experiments and reviewed Dr. Rascher's tests at Dachau. Hall found that a subject's metabolic rate changed daily and these subjects were able to stand varying degrees of cold on different days. He cited a case in the Korean war in which a pilot ditched in 40° F water and was picked up by a rescue craft within 20 minutes only to die within moments after being rescued. Mr. Hall mentioned the importance of men keeping their hats on while in the water. "If their cap gets wet, they should wring it out with their hands and put it back on their heads. You would be surprised how much body heat is lost when the head is uncovered." Needless to say, Mr. Hall's experiments never reached the critical degree in human endurance that Dr. Rascher's did.

In Pennsylvania, during 1967, thirty-three people drowned as a result of boating accidents. Falling overboard is considered an accident if it results in death. Thirty of the thirty-three deaths involved canoes, rowboats or open power boats. Only three deaths involved an inboard power boat.

Sixteen deaths occurred before June 1st. Only eight persons lost their lives during the biggest boating months, June, July and August. In Pennsylvania, nine persons lost their lives between September and December as a result of boating accidents.

The statistics almost prove that fatalities do not involve pleasure boatmen, but people using boats to accomplish some other purpose such as to fish or hunt.

Throughout the northern half of the United States, bodies are removed from cold lakes and rivers in the fall, winter and spring. The victims are listed as having drowned. Most did drown, but it was as a result of cold water immersion. If these same people had fallen overboard in July or August, many would be alive today.

Trained men in top condition find they can barely swim with clothes on. A heavily clothed hunter doesn't stand a chance of staying afloat long.

Having a life preserver in the boat isn't enough in the

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WHAT IS IT / WHO IS IT?

THE COMMISSION

Comprised of nine Commonwealth citizens, the Pennsylvania Fish Commission is responsible for the administration and enforcement of Pennsylvania's fish and motor boat laws. Members of the Commission are appointed for eight year terms by the Governor and are subject to confirmation by two thirds of the members of the state Senate. All serve without compensation.

Eight Commission members represent individual districts, each composed of a block of several counties, while the ninth member serves in an "at large" capacity.

Individual Commission members and the districts they serve are shown on these pages.

AT LARGE—

Commissioner Howard R. Heiny of Williamsport serves "at large" as a member of the Pennsylvania Fish Commission.

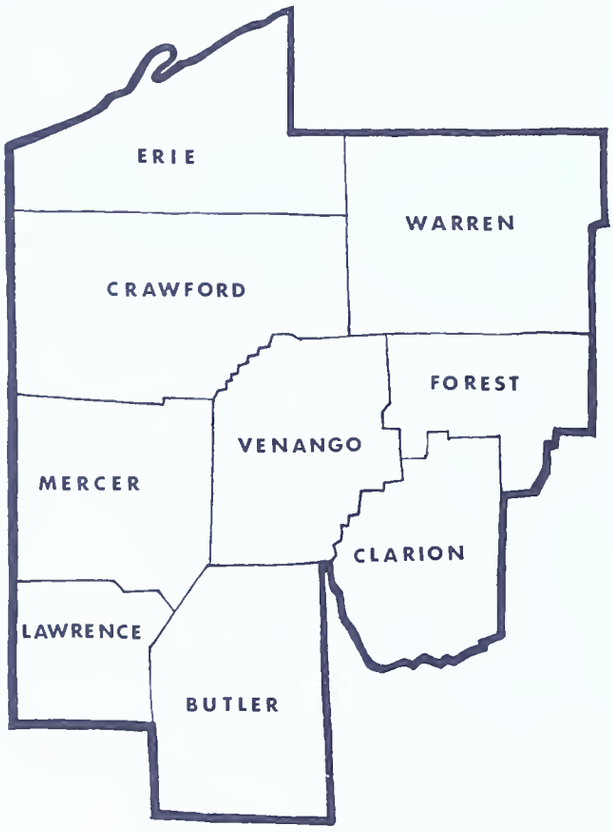
Charged with the specific responsibility of representing boating interests on a statewide scale, he was appointed to the post in 1963. He served as vice president during the 1965-1966 fiscal year and became president of the Commission in 1967-1968 for a one year term.





HOWARD R. HEINY

An active businessman and community leader, Mr. Heiny has served as a director and officer of a variety of organizations. Currently he is a director of the Pennsylvania Boating Association, as well as a member of the Coast Guard Auxiliary, the West Branch Motor Boat Association, and Bald Eagle Power Squadron.





WALLACE C. DEAN

DISTRICT ONE—

Commissioner Wallace C. Dean of Meadville is the longest standing member of the Pennsylvania Fish Commission. Appointed to the post first in 1953, he was reappointed in 1961 for a second eight-year-term.

Representing the Commission's First District, Mr. Dean has been active in community affairs throughout his career. He's past director of the Northwest Division of the Pennsylvania Federation of Sportsmen's Clubs, a past president of the Exchange Club and a former School Board member, having served in each capacity for several years. Presently he's a member of several sportsmen's groups in the state's northwest corner.

Twice during his years with the Commission he has served as its president. In 1960-1961 and again in 1963-1964 he was elected to that office.





R. STANLEY SMITH

DISTRICT TWO—

Commissioner R. Stanley Smith has served on the Pennsylvania Fish Commission since 1955. Representing the Second District, the southwestern part of the state, Mr. Smith lives in Waynesburg.

An attorney, he is currently chairman of the board of County Commissioners of Greene County. Following his original appointment to his post he was reappointed for an eight year term in 1962. He served as Commission president in 1955-1956 and in 1956-1957.

Mr. Smith has been active in the Izaak Walton League on local, state and national levels and is a charter member of the Greene County Chapter. He is past president of the Fort Jackson Chapter of the Sons of the American Revolution.



ROBERT M. RANKIN

DISTRICT THREE—

The Commission's Third District is represented by Commissioner Robert M. Rankin of Galeton.

Appointed to the post in 1963, Mr. Rankin is well known throughout his district, particularly for his efforts on behalf of the Commission's Cooperative Nursery Program.

A charter member and first president of the widely known Potter County Anglers Club, he has been active in sportsmen's circles in the northcentral part of the state. Currently he's a member of the Marionville Rod and Gun Club, Project Brookville, the Elk County Anglers and the Tiadaughton Chapter of the Audubon Society as well as several others.

He was elected vice president of the Commission in 1964 and then in 1965 became president.





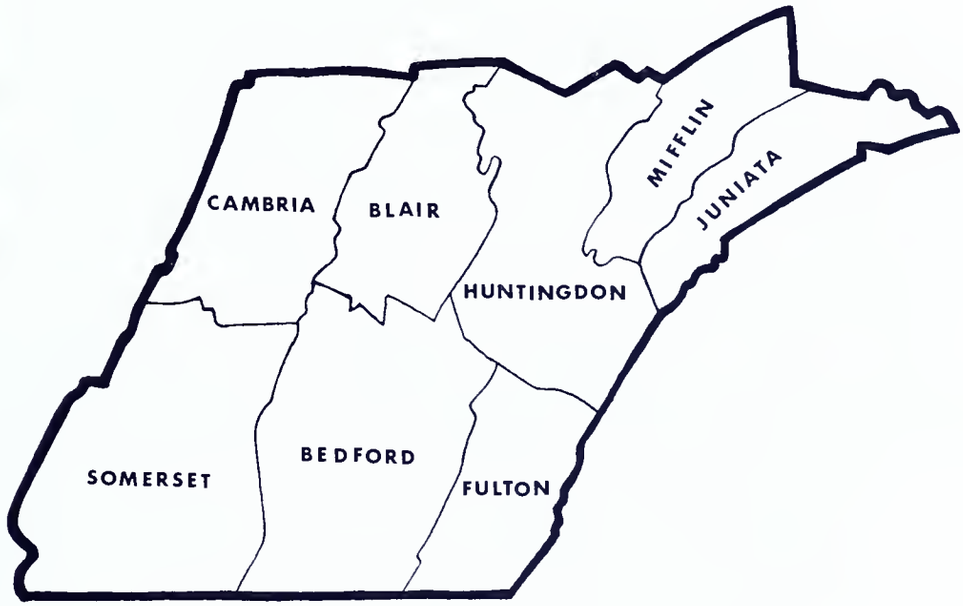
CLARENCE E. DIETZ

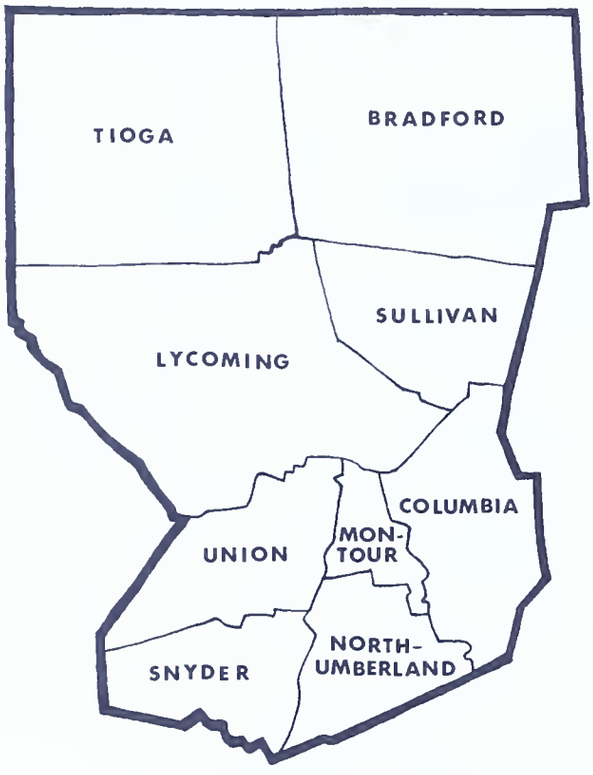
DISTRICT FOUR—

Pennsylvania's Fourth Commission District is represented by Commissioner Clarence E. Dietz of Bedford. Appointed to the Commission post in 1966, he is currently serving as vice president of the Commission.

A former treasurer of Bedford County, he is a member of several service groups and has taken an active interest in conservation and veterans affairs.

He is past president of the Bedford County Sportsmen's Clubs, a former Commander of District 17 of the Veterans of Foreign Wars, a member of the Rotary, Elks, Moose, the Everett Sportsmen's Association, and numerous others.







DOUGLAS MC WILLIAMS

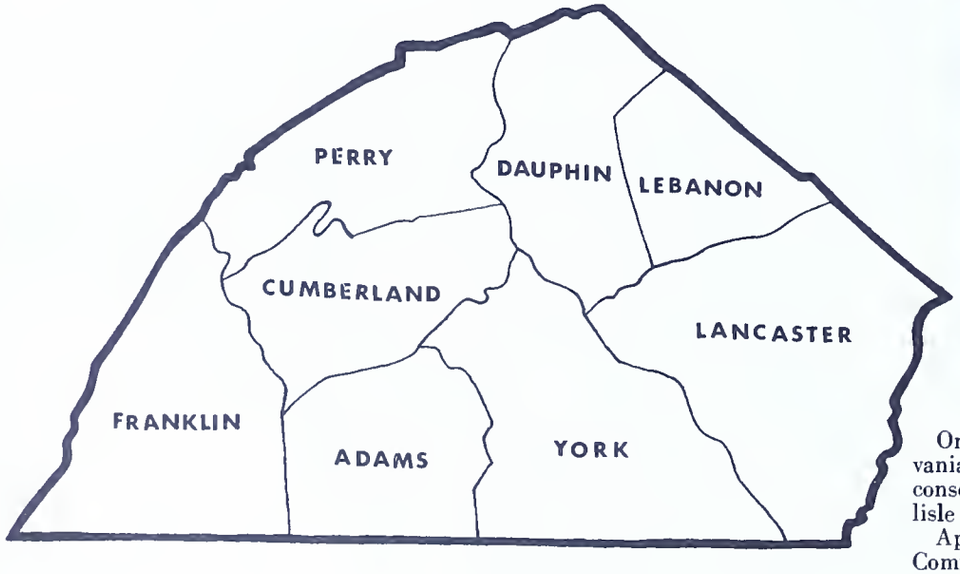
DISTRICT FIVE—

Currently serving as president of the Pennsylvania Fish Commission is Douglas E. McWilliams, Jr. of Bear Gap. Commissioner Williams was appointed to the Commission in 1964 and represents the Fifth District.

He served as the Commission's vice president during the 1967-1968 fiscal year, before being elected president at the July meeting last year.

Actively participating in local as well as state and national organizations, he belongs to numerous conservation and sportsmen's groups.

He's a member of the National Parks Association, the American Museum of Natural History, the American Forestry Association, the American Legion and Optimist Club.





FRANK B. MASLAND, JR.

DISTRICT SIX—

One of the newest appointees to the Pennsylvania Fish Commission is a nationally known conservationist, Frank E. Masland, Jr. of Carlisle who represents the Sixth District..

Appointed to the Commission late in 1967, Commissioner Masland has actively served conservation efforts on local, state and national levels. A special consultant to former Secretary of the Interior Stewart Udall, Mr. Masland is a trustee of the National Parks Association, a member of the Board of the Academy of Natural Sciences of Philadelphia, a collaborator with the National Park Service, 1966 Chairman of the Governor's Conference on Natural Beauty, a member of the Commonwealth Priorities Commission, and a member of the Conservation-Outdoor Education Advisory Committee.



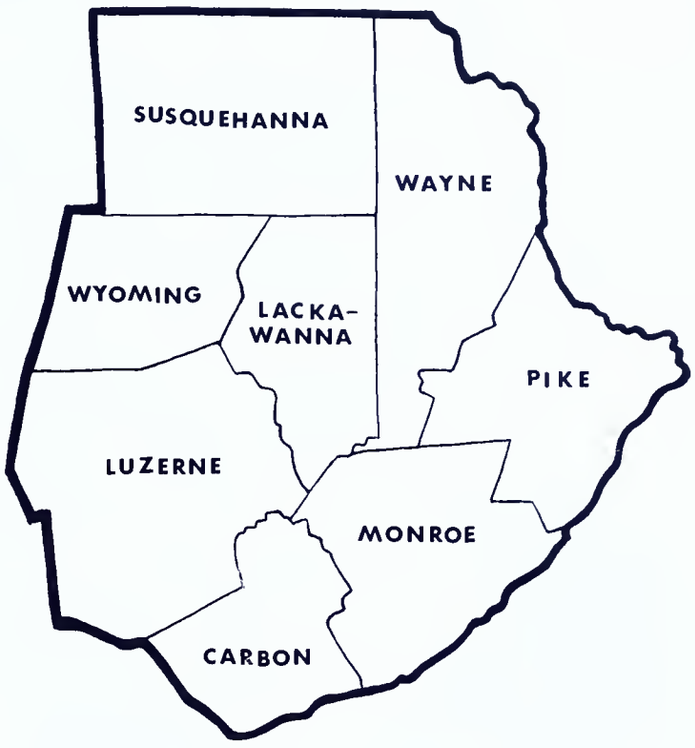
GERARD J. ADAMS

DISTRICT SEVEN—

Commissioner Gerard J. Adams of Hawley in northeastern Pennsylvania's Wayne County was first appointed to the Commission in 1955. He was reappointed in 1960 and then appointed in 1968 for another eight year term.

Representing the Seventh District, he is well known throughout the area. He's been a delegate to the Pennsylvania Federation of Sportsmen's Clubs state convention and is a past president and officer in several sportsmen's groups. Community service activities include membership in the Chamber of Commerce, Rotary, and Red Cross.

He has been president of the Commission twice since his appointment.





CALVIN J. KERN

DISTRICT EIGHT—

Newest member of the Pennsylvania Fish Commission is Calvin J. Kern of Whitehall, representing the Eighth District. He was appointed to the Commission in July of 1968.

Mr. Kern served in the past as president of of the Lehigh County Federation of Sportsmen's Clubs, the Lehigh County Fish and Game Protective Association and as an alternate delegate to the State Federation of Sportsmen's Clubs.

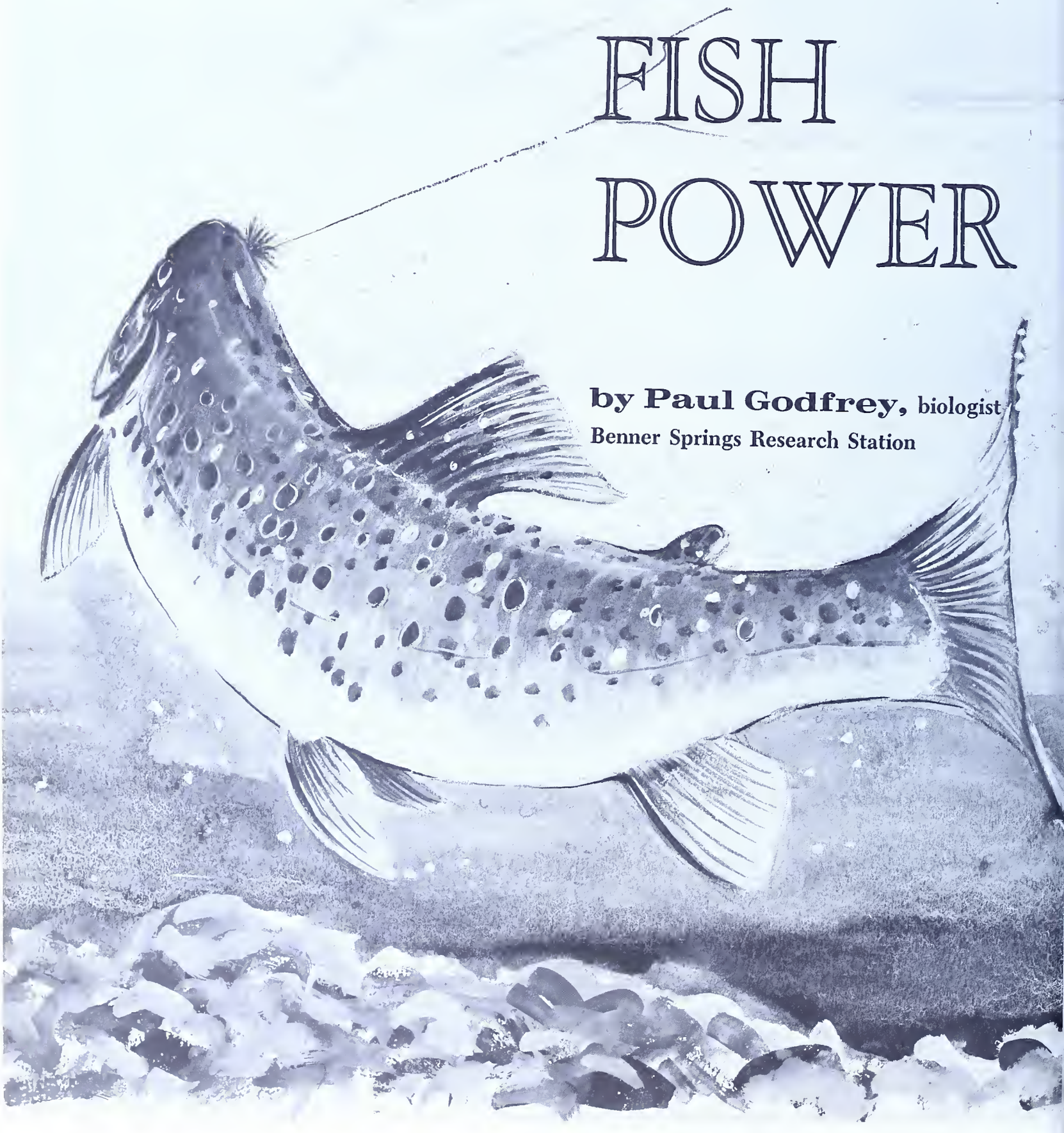
He is a member of the Allentown Chamber of Commerce Water Resources Committee as well as a member of the Park and Recreation Commission and has been awarded the Victor Steckel Conservation Award for his conservation efforts.



WHILE FLOWER POWER BLOSSOMS THROUGHOUT THE LAND AND HORSEPOWER CONTINUES TO GROW BY LEAPS AND BOUNDS ANOTHER KIND OF POWER SHOULD BE OF INTEREST TO PENNSYLVANIA'S FISHERMEN. IT'S CALLED . . .

FISH POWER

by Paul Godfrey, biologist
Benner Springs Research Station



I'M SURE WE'VE ALL WONDERED just after that "big one" got away, how a fish swims fast and powerfully? But to understand how, we must first consider a few principles of water and how fish use these principles.

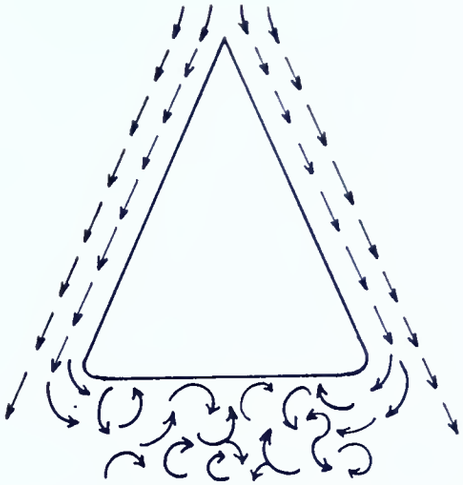
We've all noticed the streamlined shape of fish and probably realized that this enables fish to cut through the water. But wouldn't it be better if the head were the most pointed and tapered region rather than the tail? This would enable it to more easily cut through the water. To answer this paradox, let's consider a series of triangle-shaped blocks in a current of water. The first block has a point facing into the current with a broad base at the tail end as in Figure One. Just as all things, water has inertia—an unwillingness to change direction. When water must change direction rapidly, it cannot do so smoothly and turbulence results—the more rapid the change, the greater the turbulence and the greater the effort required to go through the water. The point on our first triangle causes the water to change direction gradually, but at the back corners of the triangle, it must turn a very sharp corner. It must turn this corner because the triangle moving forward leaves an empty space behind it. This is an area of partial vacuum that draws nearby objects into it to fill the void. It pulls the water around the sharp back corners of the triangle and creates turbulence. The vacuum also pulls back on the triangle itself.

Our second triangle has the point at the tail end and the base forward. This also forces the water to go around corners but notice that most of the area behind the corners and the base is filled by the rest of the triangle. Much less turbulence and drag is created because there is little partial vacuum space to be filled. Figure Two illustrates this.

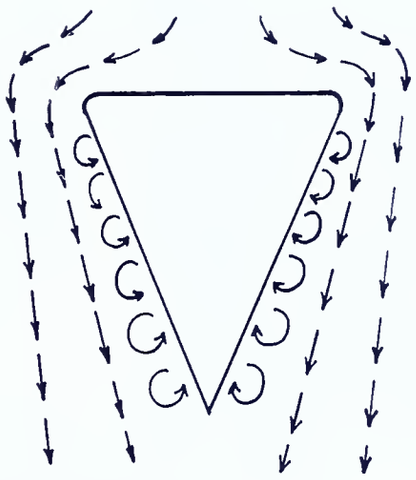
Summarizing this, in a flow of water the upstream part of the body up to the thickest section is less critical than the remaining downstream section. In our fish, it means that the shape of the head is less critical than the shape of the tail.

While one end's shape is more critical than the other there is no reason for not combining the two triangles base to base in a spindle-shape. (Figure Three) This gives us a smooth entry through the water and little turbulence leaving it, and is the basic shape of fish. The majority of the internal organs and adaptations for different feeding habits are concentrated in the less critical head end. This explains why trout and pike are so different in the head region and so similar in the tail region.

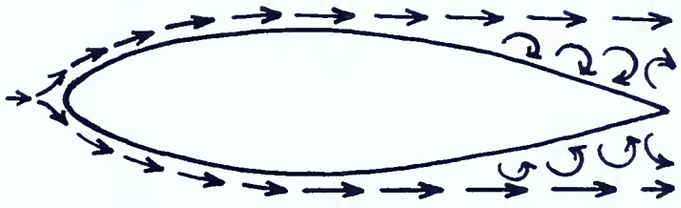
So far we've streamlined the fish, but we haven't yet discovered what makes it go. When you've skinned out your day's catch, you may have noticed that the meat on the fishes' side is in a series of muscle blocks closely packed together. Two-thirds of a trout's weight is in these muscle blocks and each one, by contraction and relaxation, controls



WATER FLOW over triangles illustrates how drag is created and how water burbles in "vacuum" areas. (above and below)



BELOW—SHAPE OF FISH is such that water flows by with a minimum of burble or drag.



part of the movement. As the fish swims, its brain sends a wave of contraction through the muscle blocks on one side starting at the head and proceeding to the tail. At the same time, a wave of relaxation is going down the other side. These alternating contractions and relaxations seen in Figure Four in effect always put part of the fish's side facing to the rear. As the rearward facing area progresses toward the tail, it pushes the water back with it. For every action there is an equal and opposite reaction and the action of water being pushed back causes the reaction of pushing the fish forward. This then is how he swims. It

continued on next page

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FISH POWER

is so effective that a trout from a resting position can cover 2″ in 1/20th of a second. However the speed that fish can sustain for longer periods of time is considerably less. The rainbow trout's maximum speed is 3.6 mph and a minnow, the dace, can muster 3.9 mph. The northern pike is one of the speedsters of freshwater with a maximum speed of 4.8 mph.

Another interesting point in the discussion of fish speed that we've all noticed but perhaps never understood, is that swimming speed and hence fighting power are related to the size of the fish and the frequency and amplitude of the tail beats. That is why the big one can put up such a struggle; and also, because of rapid tail beats, why some small fish seem to put up an inordinately strong fight.

The tail can also be used as a rudder to control the direction of travel. I've been speaking of the tail as the part of the fish from its thickest point back to the end of the tail fin and not just the tail fin. The tail fin enhances the propulsive ability of the tail and adds refinement through better control.

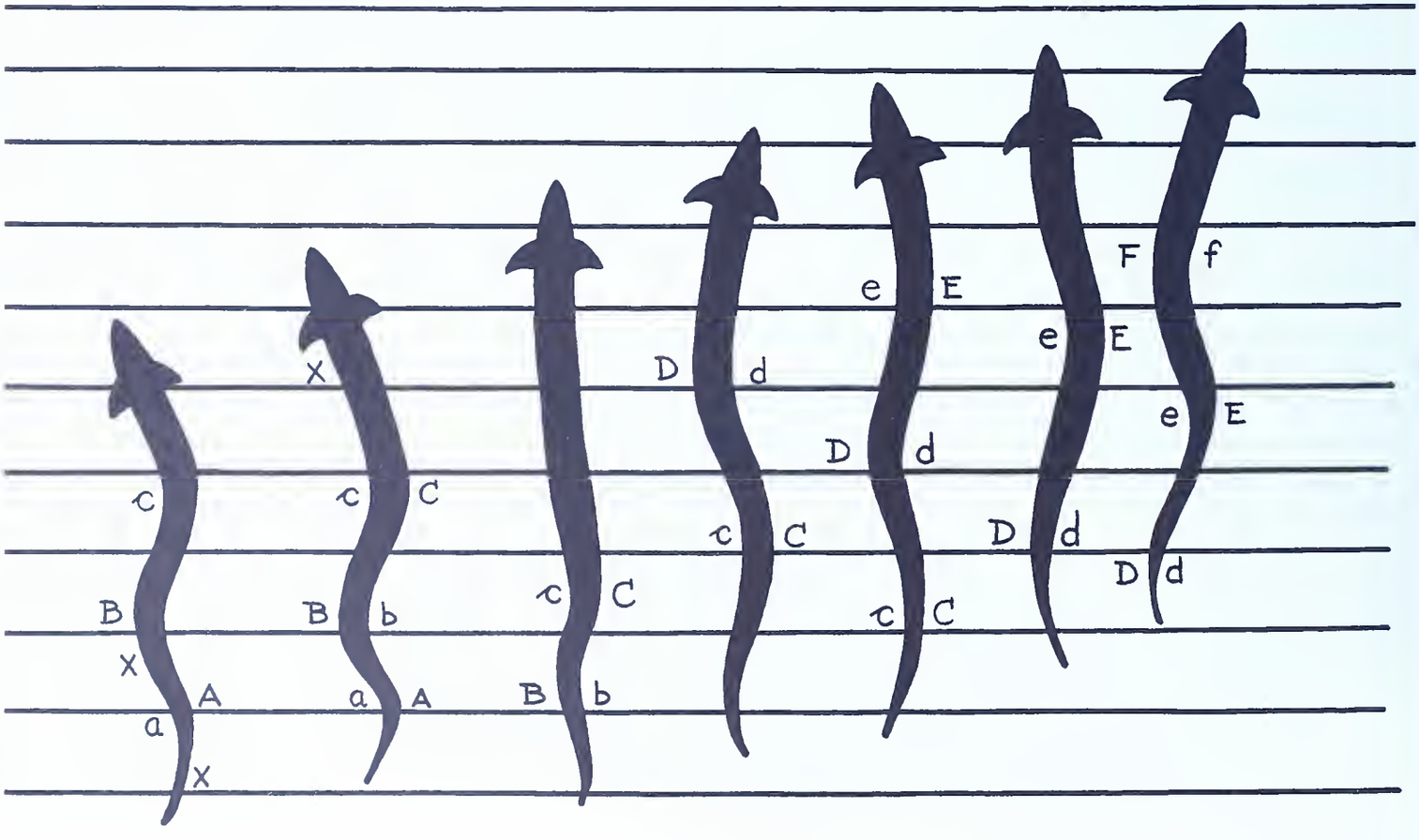
So far we've only considered the tail's function in swimming, but there are other fins on a fish. Generally when swimming rapidly, the fish folds these fins back against the body to increase its streamlining; but in normal cruising and feeding movements, these fins play an essential part. We have two types of fins to consider. The most noticeable ones are the dorsal and ventral fins. As their name implies, they are the ones lying in the midline of the fish, one on the back and one on the belly. Their main function is much like the feathers on an arrow—to stabilize the fish as it swims. The swimming movement of the tail produces a yawing tendency in the fish and these fins damp that yaw by adding resistance to sideward movement. These fins are made up of more or less bony rays with membranous skin stretched between. Anyone who has caught a perch or walleye has probably felt these rays before he has seen them. For the biologist, a count of these rays in the dorsal and ventral fins can distinguish between similar fishes such as black and white crappies.

Some fish such as our bowfin have a dorsal and ventral fin the length of the tail and joining with the tail fin. This fin can be undulated much as the tail is in swimming to give a very slow movement to the fish, scarcely noticeable to the fish's next meal.

The remaining two types of fins on fish are called paired

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SUCCESSIVE POSITIONS of the same eel shown during swimming illustrate what makes a fish move through the water. The lower case a, b, c, are successive waves of contraction while the capital A, B, C are the convex bulges formed opposite them. The X indicates surfaces which move backwards with the contraction wave, pushing water and driving the fish forward.





AN EARLY SPRING morning on a favorite lake, is a great way to enjoy yourself.



POWER GALORE and lots of open water is a good way to fullfill the competitive urge (left) or standing midstream in spring's warm sunshine may be the answer (right).





WATER SKIING is loads of fun for those agile enough to participate.

IF YOU'RE ONE OF THOSE PENNSYLVANIA CITIZENS WHO LIKES TO GET OUTDOORS THIS IS THE TIME OF YEAR WHEN YOU'LL START ENJOYING . . .

Keystone Watersport

NEXT TWO PAGES

Keystone Watersport



THE URGE PROBABLY first stirs during those few warm days in March when the returning sun overthrows the chilly wind and bathes the countryside with a warmth nearly forgotten. By April many Keystone Staters are bursting with eagerness to get outdoors and enjoy the budding life that has started to appear.

Water, and the sports it provides, will play an important role in Pennsylvania's recreation for the next several months.

Whether it's water skiing, houseboating, fishing or just swimming Pennsylvanian's and outsiders will enjoy some part of Pennsylvania's many waterways this season. Some will find moments of solitude; others will join relatives and friends for group fun.

During March and early April streams and lakes throughout the state are being stocked with thousands of trout. Every day truck load after truck load are hauled from Commission hatcheries for deliver to all parts of the state to provide fun and excitement for those fishing in Pennsylvania. Nearly two million trout will be released by the Commission, Cooperative Nursery Clubs and the Lamar National Fish Hatchery by opening day April 12.

At the same time boaters are taking their boats out of storage for another season of water fun. Canoes, kayaks, rubber rafts now begin appearing on upstream waters in great numbers as many people enjoy a different look at the countryside by floating through it or seek the challenge and thrills of white water.

Power boaters also begin to appear at this time of year. From Allegheny County where nearly 12,000 boats were registered in 1968 to the mountain counities where only a few boats are registered, power boats of all description churn the water. Last year nearly 95,000 power boaters used the state's waters; this year it may reach 100,000. Already boats are beginning to appear on major waters such as the Ohio, Allegheny and Monongahela and soon upstate vacation areas such as the Poconos and the Kinzua Country will be sporting recreational boats by the thousands.

Pennsylvania's thousands of acres of water; hundreds of miles of stream slightly swollen by last winter's snow, will soon be swollen another way—by thousands who enjoy Keystone Watersport!







GAZING AT the sparkling surface of a quiet lake is a good way to reflect on life (above) or perhaps a canoe and a glassy pond (first, right) is the way to get away from it all. Interesting things may be discovered if you're one of the thousands who visit Pennsylvania Fish Commission Hatcheries this summer (second, right) while team skiing and competitive sailing events may provide the challenge daily routine leaves unfullfilled (three, four—right).

FISHING MAY BE the all time favorite way to enjoy oneself!

PICTURES Bill Miller
Tom Eggler

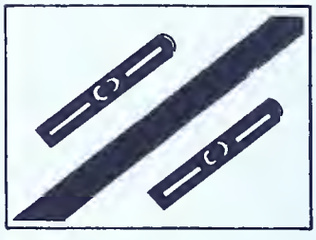








ONE



TWO



THREE



FOUR



FIVE



SIX

A CIRCLE on a buoy—number one—indicates edge of a controlled area. The circle is orange and lettering stating restrictions are in black. The flag shown in number two is used to mark a boat being used to pick up water skiers. It is white with a red stripe. The two ski symbols are also in red. The other flag—number three—is used to designate an area where divers are working. It is red with a white stripe. Buoys of a solid color—black or red—are used to mark channels. When proceeding upstream black marks the left and red marks the right. Coming downstream it's the reverse, of course. Number five is a mooring buoy—it's white with a blue strip around the center. Number six is a mid channel buoy. Boaters may pass safely on either side. It's white with black stripes.



ONE



TWO

MARKER NUMBER ONE means "keep out!" An explanation such as the "swim area" designation shown here accompanies the crossed diamond shown here as well as in the picture above. Symbol number two indicates danger nearby. Nature of the danger may be indicated by the words inside the diamond. Number three is used for directions, distances, locations, etc. All three symbols are orange on a white background with black letters.



THREE

WATERWAY MARKERS

HAVE YOU EVER STOPPED to consider how confusing it would be if every town or city you drive through had a different set of symbols for highway traveling? Can you imagine a blue traffic stop light, a black stop sign in a triangle shape, a blinking green caution light?

Until a few years ago this would have been a description of the nation's inland waterways markers. Conformity was sadly missing between water areas and states in marking water traffic routes and obstacles.

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Just about anyone can fire up a power boat and head for a spin on Pennsylvania's many waterways but the trip may be a short one for the inexperienced boater who doesn't know what all those buoys mean....



SPECIAL WARDEN Glenn Klinger gets ready to begin setting buoys. During 1969 some 812 will be placed in Commonwealth waters by the Pennsylvania Fish Commission as navigational aids.

Waterway Markers / *KNOW THEM!*

by DEAN KLINGER

Chief Marine Services Specialist
PENNSYLVANIA FISH COMMISSION

continued from previous page

WATERWAY MARKERS

In the Keystone State the much needed system to assure conformity came as a result of the Pennsylvania Fish Commission adopting the "Uniform Waterways Marker System" as approved by the Advisory Panel of State Officials to the Merchant Marine Council, United States Coast Guard.

Boatmen should be familiar with the different colors and symbols to insure safety afloat on Commonwealth waters as well as the inland waterways of other states.

The color red is always used to mark the right side of a channel traveling in upstream direction or returning to port. A good rule to remember here is Red Right Returning.

The color black is used to mark the left side of a channel traveling upstream or returning to port.

Channel marking buoys may be used in pairs with the red and black across from each other or they can be used singly in a staggered fashion on alternate sides of the channel spaced sufficiently close to each other to inform the boater where the channel lies. In the event any of these markers are numbered the black ones will use odd numbers such as 1, 3, 5, etc. and the red ones will use even numbers such as 2, 4, 6, etc. Most Commission owned buoys have a three inch band of retro-reflective tape near the top to permit safer night navigation. Green tape is used on black buoys and red tape on red buoys. This tape reflects even the smallest amount of light. And certain hazardous areas of heavy nighttime traffic have buoys which are equipped with automatic flashing lights. Black buoys use green lights and red buoys use red ones.

Black and white vertically striped buoys are used to indicate the middle of a channel. They may be passed on either side.

White buoys are used for many different purposes. The important thing to watch on a white buoy is the orange symbol and the black lettering.

An orange square or rectangle is used on a white background to give information such as distances, names, availability of gas, oil, etc.

An orange circle on white background indicates controlled areas such as 5 MPH, NO FISHING, SKI ONLY, etc. This information should be adhered to by the boatmen to avoid violation of special rules and regulations.

An orange diamond on white background warns mariners of danger in the area. The black printing may read ROCK, SHOAL, STUMPS, etc. Extreme caution should be used in these areas.

An orange diamond with a cross inside it on white background means "BOATS KEEP OUT." It may be lettered in black as SWIM AREA, DAM AHEAD, RAPIDS, etc. An operator should not go past any of these markers for the safety of himself and his passengers. And legally, going beyond this type of buoy is evidence of negligent operation.

An all white buoy with a blue stripe horizontally through its center indicates a mooring buoy. This is the only type of buoy that can be used for tying a boat. It is extremely important for a boater to never hamper with or tie up to a regulatory marker as this could possibly move it off station.

A boater should never rely completely upon the location of a buoy until he has checked with familiar landmarks because of the possibility of storms, logs, or other debris moving them from their intended position. Any aids to navigation which are off station should be reported immediately either to the District Waterways Patrolman or to the owner of the buoy whose name should be printed near the waterline.

Last season 492 Commission owned buoys were in use on Pennsylvania waterways along with several hundred owned by clubs and individuals and approved for installation by the Waterways Division of the Commission. Present plans include an increase of about 70% of Commission owned buoys for the coming season.

The entire program is possible only through the splendid cooperation between boating clubs and rescue organizations whose members spend countless hours per season caring for, checking and maintaining the buoys so pleasure cruisers are assured the full value of the program.

If for any reason a boater has an accident involving a buoy it must be reported as soon as possible to the Commission in writing.

Occasionally some buoys have been damaged or destroyed by vandals. However the cooperation and watchful eyes of our many water users has lead to the vandals who have been apprehended and dealt with according to the law. Remember if you see anyone tampering with or destroying an aid to navigation it is not only the fact that you helped pay for it and own it, but the fact that your safety afloat is also at stake.



AUTHOR DEAN KLINGER checks the position of a marker on the lower Susquehanna. Danger markers, such as this, usually have the nature of obstruction marked inside. This buoy is one of a type now being widely used by the Commission in its waterways marking program.

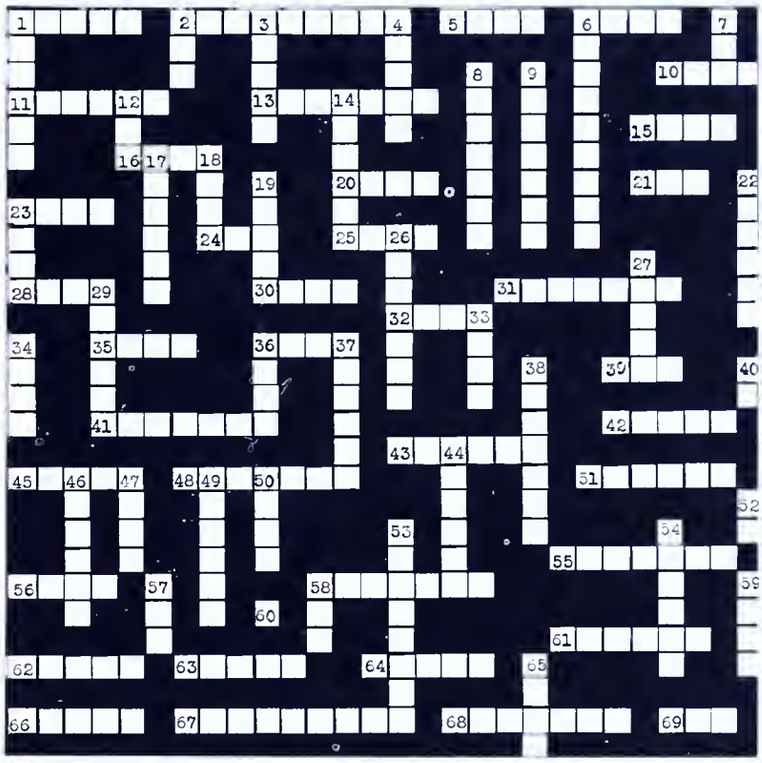
THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

This is the time of the year we've all been dreaming about all winter long but if the days are still a bit too chilly for boating try your hand at this nautical crossword puzzle.

ANSWERS ON PAGE 64



ACROSS

1. At a right angle to the keel.
2. The middle of a boat.
5. The opposite of aft or after.
6. To pack the cargo.
10. A nautical name for rope.
11. On the water.
13. Objects placed along the side of the boat to keep the hull from chafing.
15. A device used for bailing.
16. To bring a sailboat about.
20. The sideward motion of a boat caused by wind and waves.
21. Mixed with fuel in an outboard.
23. To fasten by means of a knot.
24. The side sheltered or away from the wind.
25. Short for a canvas covering.
28. Leaning of a vessel toward the side.
30. The alternate rise and fall of water.
31. Space in the afterdeck of small boat for helmsman and crew.
32. The foreward edge of a fore-and-aft sail.
35. The moving waves, track or path left by a moving boat.
36. General term for masts, yards, booms.
39. Color of a port-side navigation light.
41. The transverse planking which forms the afterend of a small square-ended boat.
42. The outward spread of a boat's sides from the waterline to the rail at the bow.
43. Used to hold a boat in a desired position.
45. The fore and aft motion as the bow and stern rise and fall.
48. A hole which allows water to run off the deck.
51. A buoyant life saving device.
55. The direction or point of a compass in which an object is seen.
56. Needed to operate a power boat.
58. A strong post for holding lines fast.
61. One of 32 positions indicating direction on a compass.
62. A map of a body of water.
63. Ribs of the hull, extending from the keel to the highest continuous deck.
64. To make fast to a cleat or belaying pin.
66. An opening in a boat's deck.
67. The distance, amidships, from the water line to the gunwale.
68. The upper edge of a boat's side.
69. A triangular sail set in front of the forward mast.

DOWN

1. On, in or into a boat.
2. A nautical affirmation.
3. The depth of the vessel below the water line.
4. The after end of a boat.
6. The right side of a boat when facing forward.
7. A necessary part of most outboard motors.
8. A rope attached to the bow of a boat used for making her fast.
9. A method of planking.
12. Toward the stern of a boat.
14. Decay of seasoned timber.
17. Towards the stern.
18. The main center-line structural member, running fore and aft along the bottom of a boat.
19. A piece of wood or metal, with projecting ends, to which a line is made fast.
22. A good tool to have on board.
23. To remove water from a boat.
26. Any of the small ropes which traverse the shrouds horizontally, serving as steps for going aloft.
27. The lower internal part of a boat's hull.
29. A seat extending across a boat.
33. A pennant.
34. The wheel or tiller by which a boat is steered.
36. The upright post or bar of the bow.
37. A devise used for steering or maneuvering.
38. The movement of the water in a horizontal direction.
40. Fire extinguisher classification.
44. The arch of a deck, sloping downward from the center toward the sides.
46. A bar or handle for turning a boat's rudder or outboard motor.
47. The body of a boat.
49. A system of planking in which the outside planking of a boat is flush.
50. The left side of a boat when facing forward.
52. Two initials of a Federal boating organization.
53. Vertical partition in a boat.
54. Required equipment for operating a boat at night.
57. Initials of a U.S. Coast Guard Auxiliary safety program.
58. The forward part of a boat.
59. An anchored float.
60. Classification of a boat less than 16 feet in length.
65. A hood shaped covering.



SASSAFRAS is easily recognized by the spicy fragrant smell of the broken twigs, by the root beer odor of its roots, and by its fan-shaped leaves in three designs. Author J. Almus Russell examines the plant.

Streamside Survival / THROUGH EDIBLE PLANTS

by J. ALMUS RUSSELL / photos—Don Shiner

NO ONE PLANS TO GET LOST. Still it happens. With nearly two million acres of Pennsylvania State Forest land open to fishing, hunting, and camping, getting turned around is not difficult.

Forewarned is forearmed, however. If you plan to fish in strange territory, let the local forester or waterways patrolman know. Then in case you do not return by a specified time, he will have a general idea of where to start looking for you.

Before leaving for that fishing trip, provide yourself with a good map of the area. Also a compass. Learn to read both. Keep local landmarks in mind such as trees, ridges, ponds, and swamps. Take matches in a waterproof case, a cigarette-lighter, fly-dope, and a day's emergency rations.

In case you have omitted this equipment, you may still "stay found" if your map is in your mind. Sun, stars, wind, and landmarks form a natural compass. Thick hemlock branches usually point to the east. Plant growth on the north side of a hill is less lush than on the south side. The compass goldenrod, a late flowering species, has heads bent toward the north.

Blaze trees in a straight line to avoid walking in a circle. Don't necessarily follow streams down hill. They may end only in marshlands, bogs, or remote ponds.

In case you are lost, shelter, fire, and food are necessities. Fish may not bite, porcupines may not be around to be stunned with a club, but edible plant roots, and berries are usually to be had. They will supplement emergency rations and can prevent starvation if you were to be lost for a long time.

And even if you have no difficulty in finding your way back to camp, gather some of the streamside plants, roots, and berries. Then experience the thrill of preparing and eating some unusual dishes. You will be surprised at what delicious food nature provides.

For instance, a marsh full of cattails yields a food dividend from spring to fall. This plant is adapted to live in moist stream inlets, swamps, and marshes.

Dig the starchy underground rootstocks, dry them, and grind them into meal. This flour makes an excellent thickening for meat stews. It may also be used in bread.

In the spring, the thick peeled shoots of the plant may be eaten raw as a salad or cooked as a vegetable. At the junction of the sprouts and rootstocks is an enlarged starchy core the size of a finger-joint. This also may be roasted or boiled.

Cattails bloom from early July to late August. They may

be gathered any time during that period. The green bloom-spikes when removed from their papery sheaths and boiled in salt water, make a delicious vegetable with the flavor of green corn. They should be eaten hot with melted butter.

The ripened blooms eventually become covered with a coating of yellow pollen, fine as sifted flour. Bend these heads over a pail. Rub the pollen off by hand. Then shake it through a fine-meshed sieve. Such "flour" makes a nourishing and flavorful ingredient for golden cattail pancakes.

The arrow arums, found in marshy areas, all bear edible tubers. They are easily recognized when in flower. They have filmy, white three-petalled blossoms, arranged in circles of three near the summit of the flower-stock.

The root-fibers spring directly from the base of the cluster of arrowhead-shaped leaves with the tubers often borne several feet from the parent plant. These range in size from peas to eggs. Cook them in the same way as potatoes to bring out their distinctive flavor.

Another arum, the wild calla lily, grows freely in shallow water or muddy muck. The plant has deep green leaves, one-half to one inch in diameter. Spathes enclose pale white blossoms similar to the cultivated variety.

After these acrid and caustic roots are dried and boiled, they may be ground into flour and made into nutritious bread.

As soon as the ground is thawed, often in February, the skunk cabbage pushes through the ground. Sometimes its spearlike spathes melt their way upward through an inch of ice or several inches of snow. First appears a leathery, shell-shaped spathe shaped like two cupped hands. Inside is a globular mass of lavender-colored flowers.

A week or two after the first flowers appear come the leaves, rolled up somewhat like a cabbage in tight cones. While the odor of the plant is that of a skunk, no trace of the smell is given off in the cooking. It is suggested, however, that the heads be cooked in several waters to which each time a pinch of soda has been added. This is said to make a fair vegetable.

Eat the leaves in the spring while they are tender. Dig the roots in the late autumn for grinding into flour. One average root produces about half a cup.

The groundnut was called Indian potato by the early settlers. It grows in moist earth near a supply of water. The tubers, one to two inches in diameter, mature in August and grow just beneath the surface of the ground as if fastened to a string. They have a smooth, sweet turniplike flavor.

Cook groundnuts like potatoes—boil, hash, or fry them as you like.

In ponds and streams, in stagnant pools and tarns, grow the swanlike white water lily and the coarser yellow lily. These starchy-rooted plants belong to the arrowroot family. Their roots are prepared by boiling them with meat or roasting them. The Indians gathered them in great quantities from the muskrat houses where these animals had stored them for the winter. They also parched the seeds, eating them like popcorn.

A stately grass rising from two to twelve feet above the water bears wild rice. This native grain grows in ponds, swamps, and streams. The seeds form on purplish spikes occupying the tip of the panicle. These are concealed in a long-bearded husk loosely attached to the branches.

The rice should be harvested just before the kernels are ripe. The stalks are bent over into a boat or canoe. Then

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THREE COMMON wild foods shown here are (left) the cattail. The starchy underground rootstocks and young, asparagus-like shoots are edible as well as the green bloom spikes and the "flower" made from the pollen.

White water lily (below) is the most beautiful and most fragrant of the lilies. The starchy roots of this plant were used for food by the American Indian by boiling them. The bulbous roots of the great yellow water lily were eaten for food in the same way.

Dandelions (right) is a common "wild" food, easily recognized and easily prepared.



High riding dry flies might be hallmarks of the accomplished angler. But sometimes it pays to fish them like an unaccomplished one!

by S. R. Slaymaker II

When dry flies get wet

by

S. R. SLAYMAKER

TO SOME, ANNIVERSARIES ARE STOCK-TAKING times for reflecting on lessons learned from the passing years' successes and failures. Like Samuel Pepys, who measured from the day that he was "cut for the stone," many pick very personal reference points. Mine comes on the second Saturday of April, Pennsylvania's first day of trout season. This anniversary—unlike some others, birthdays, for example—has the merit of being breathlessly awaited. So much so that it's become more than simply a time to reflect on fishing lore acquired since the last opening day. Rather, its importance is manifest by the fact that the darndest things happen on this particular day by way of lessons learned or unlearned. Were some of these experiences to come to pass in mid-season they might well go unnoticed. But never on Opening Day. Nineteen-sixty-eight's was no exception.

"Saturday, April 13. A beautiful day," reads my fishing diary. "Morning cool, from mid 60's to low 70's. Water level perfect. Excellent action on Quill Gordon, Leadwing and Hendrickson nymphs and wet flies . . ."

Stream-bred brown trout in a favorite Pocono stream took in typical slow, nymph fashion deep and in mid-depths.

At noon the Reverend Sam Huffard arrived from East Stroudsburg, where he had recently assumed the pastorate of the First Presbyterian Church. Sam, formerly my minister in Gap, Pennsylvania, and I had gone on Pocono fishing jaunts for ten years. So it was a happy coincidence that his new call landed him in the heart of some of Pennsylvania's prime trout water. Not that this was purposely contrived on Sam's part. Perish the thought! For there were reasons bearing on challenges of an ecclesiastical nature, the validity of which I'm not so rude as to question.

Before Sam's departure for the Poconos the previous winter, we were both in dire need of blue dun gamecock necks, indispensable for the tying of such early season musts as Quill Gordon and Hendrickson dry flies. Genuine blue dun hackles insure maximum floatability. Dyed imitations don't. Minister's salaries rarely permit thirty to forty dollar indulgences in genuine hackle. And Mrs. Slaymaker made it clear that "no mangy old chicken neck" was going to preempt the children's new shoes. So we settled on ersatz blue dun necks at a more reasonable $5 each.





The diary goes on: "Shortly after Sam arrived, Quill Gordons began to hatch. By 2 P.M. temperatures approached the high seventies. Flies were coming off the water in fair quantities. Trout took slashingly, just under the surface. . . . It was time to fish dries!"

I had a few beautifully tied Quill Gordon dry flies left over from the previous season. Custom tyer, Jack Montague, of Suffern, N. Y., had given them to me. Jack's ties sport only the best of materials. So I vowed to conserve them, thus precluding use of those latest facsimiles of phony blue dun. On glassy slicks and tea-colored glides the little #14 imitation rode as erectly as its natural counter-parts. Now and again a trout swirled under it. But there were no takes.

Sam, well upstream, appeared frustrated. I could tell from his too pronounced back cast, punctuated by impatient glances in my direction. Figuring that his new flies might be sinking, I moved up to offer one of the Montague numbers.

"This thing won't float," he muttered on starting to pick up line. "Fibers are to supple—oops!"

Water crashed. With his tawny flanks a-glitter, a foot-long brownie arched out of white capped riffles. The fish fell back with a ringing surface-spank and sped upstream to a deep cut bank. Steadily retrieving slack, Sam advanced, his line taut and rod held high. Increasing pressure on the fish spurred it back to mid-stream. After some lateral runs, followed by a long one up the middle, Sam was able to drift the lovely trout to net.

"Pure luck," he grinned. "But ya' know, I'm going to stick with this thing."

I remonstrated to the effect that a dry fly fished wet or —in this case—nymph fashion, wasn't proper. "Dries should be fished dry and wets wet," I reminded him. But he refused my stiff-hackled Quill Gordon and went back to casting.

In scant minutes he was into another brown. Then another. All the while his fly rode sub-surface. A wisp of curling hackle, protruding like a warped periscope, was the sole indication that the fly was meant for the surface.

"I've never seen such a sloppy sight," I told him; going on to cite mutual friends of the purist persuasion who would not be amused. But Sam was undeterred. He rose a lot of fish over the next hour, missed some, lost a few and

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Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



UNSUCCESSFUL "EXPERTS"—

■ Three fellows I know recently took a ten mile float trip down the Allegheny River from Thompson Eddy to the Pennsylvania Fish Commission's Access Area at Tidioute. This stretch covers a distance of approximately ten miles. Not one fish was caught by this trio of supposedly "expert" anglers. However, upon return to Thompson Eddy to pick up the other car, they got into a conversation with a Mrs. Smith who lives nearby. She produced four very nice walleyes which she had caught during the afternoon!—***Waterways Patrolman BERNARD D. AMBROSE*** (Elk County).

FINAL SUCCESS

■ While vacationing in Wyoming County, we saw a young man catch a nice 27 inch walleye. He hooked the fish while fishing from a boat. His buddy rowed to shore where he could play the fish to a better advantage. Three boats floated past while he battled the fish and each time he would ask to borrow a landing net. No one had one. He worked the fish to shore several times and his friend tried to land it with the slatted seat of the boat. I expected to see him lose it at any time, but at last he got it in a small eddy and his friend trapped it there with the boat seat. At last he picked it up with his hand and threw it up on the bank.—***Waterways Patrolman CLOYD W. HOLLEN*** (Blair County).

UNBREAKABLE BOND

■ Here is a timely tip for trout fishermen that was told to me by Don Jordan of Jordan's Sport Shop in Punxsutawney. Fishermen strive to make the smallest knot possible when tying leader to a fly line and many use a no-knot eyelet to achieve this purpose. If you are using a hollow fly line, Don Jordan suggests you feather the end of your leader with a knife, making it rough. Then coat the leader with epoxy glue and insert it two or three inches into the hollow fly line. Allow to set for three or four days. Results: An unbreakable bond is formed between line and leader—and the best part is that there are no knots.—***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County).

CLOE LAKE CROWD—

■ The opening day of the 1968 trout season was expected to be a big event at the Pennsylvania Fish Commission owned Cloe Lake in Jefferson County but no one expected it to be as big as it was. Opening day more than 300 cars and 1,200 fishermen surrounded the lake with more than 60 boats afloat, and I'll bet '69 will do even better!—***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County).

FISH TALE BATTLE

■ Deputy Game Protector Steve Hale of Tionesta, tells a fish tale about a fish tail! He was jigging for walleyes in the Allegheny River near the village of Trunkeyville and hooked into what he thought was the granddaddy of all Allegheny walleyes. After a battle which lasted well over half an hour, he landed the monster—and found out that it was a big old carp. It was 31½ inches long, weighed over 20 pounds, and measured 23¼ inches at the girth. He had hooked it in the tail!—***Waterways Patrolman JOSEPH KOPENA*** (Forest and Clarion Counties).

EASY TROUBLE!

■ During small game season, I saw a man walking toward his car from the direction of the Allegheny River. As he was carrying a fishing rod, I stopped to check his license and to see if he'd had any luck. The first thing he said when I approached was that he had just seen a big 8 point buck. I asked if he planned to try for the deer in the coming buck season but he said "No, I don't hunt. It's too easy to get into trouble. I'll stick to fishing."

"What kind of trouble are you talking about?" I asked.

"Well, whoever heard of carrying a loaded fishing rod in a car, or fishing after hours, or fishing in a safety zone, or fishing within 25 yards of a road? You don't have all those worries when you go fishing," he said.

The story should end right there, but it doesn't—in his trunk I found two illegal trout!—***Waterways Patrolman GEORGE R. JONES*** (Warren County).

DRESSED FOR SPEED

■ While on patrol near McKeesport, I checked the newly constructed Fish Commission's Access Area at the mouth of the Youghiogheny River. A group of young boys with homemade gocarts were using the long, sloping, blacktopped ramp as a gocart track. One lad with a gocart named "The Bat Mobile" would race down the slope and land with a huge splash right in the River. But what really



topped this young racer off was a steel worker's hard hat, safety goggles and a scarf flowing from around his neck!—*Waterways Patrolman JAMES R. SMITH,* (S. Allegheny County).

MAGIC TOUCH?

■ When checking a father and his three sons who were ice fishing on Promised Land Lake, I found they had an agreement that when one boy caught a fish on a tip-up, he had to give up that spot to the next boy whose turn it was to catch a fish. For some reason, the spot didn't seem to make any difference to the one son. No matter where he moved, he caught fish, so they finally gave up the game and let him choose his own spots. He still caught about twice as many fish as the other three. It just goes to show you that a lot of fishing is just plain being lucky.—*Waterways Patrolman JOSEPH E. BARTLEY* (Pike and Wayne Counties).

COOPERATIVE CO-OP

■ The Potter County Anglers Club was very generous again this year to Tioga County. About 1,250 trout were stocked in Beechwood Lake for winter trout season by the club. Rainbow trout weighing from 5 to 7 pounds were included in the load of fish, which contained many brown trout nearly as large. This is a very fine example of what one cooperative nursery can do for fishing in an area.—*Waterways Patrolman RAYMOND HOOVER* (Tioga County).

MR. FISHERMAN!

■ Ralph Meyers of Huntingdon has a reputation for being one of the finest fishermen in this area. Part of his success can be attributed to the fact that he begins his real serious fishing just when most other anglers are putting their gear away for the winter. Around the beginning of October, Mr. Meyers concentrates his efforts at the Raystown Dam with his main target being the largemouth bass. His job allows him several hours on the water during the late afternoon and evening hours. He uses but one lure exclusively, a minnow-shaped deep running killer, that accounted for one hundred and thirty-three largemouth bass during the months of October and November. Many of the fish are in the three to four pound class and occasionally he lands one five pounds or better. His effort and success has earned him the title "Mr. Fisherman" in Huntingdon County.—*Waterways Patrolman JAMES T. VALENTINE* (Huntingdon-Fulton Counties).

MORE ICE FISHERMEN—

■ For the past 16 years I have seen the population of ice fishermen increase to the point where one can observe as many fishing on a cold winter day as on many a summer day. But these fishermen are in a class of their own. No weather is too foul or ice too thick. They never complain—they just wait for the big ones to come along, and many have been awarded with their patience. These fishermen are to be commended for their stamina, will and patience. Here in Bradford County, as in many of the other counties, the Commission has kept up with this ice fishing trend, by introducing trout and smelt in the lakes and muskies in the river.—*Waterways Patrolman WILLARD G. PERSUN* (Bradford County).

SNAKES AHEAD!

■ While on routine patrol along the Clarion River I observed a vehicle parked along the road. I got out of my vehicle and walked along the river bank until I saw a man and a woman—he was fishing and she was standing nearby. I watched for approximately 10 minutes when the woman turned around and spotted me. "There's a warden in back of us," she announced. The man turned around, looked at me and continued fishing. As I started down the river bank, he turned around again and yelled "You better not come down, there's a snake in that brush pile."

"I know there's a snake in the brush pile but it's only a water snake and they don't bite," I answered. Then I asked this fine gentleman if he had a current 1968 fishing license. With a big smile and a "HO, HO, HO," this fine man who was trying to protect me from that mean old snake said he didn't have a license!—*Waterways Patrolman JOSEPH KOPENA* (Forest-Clarion Counties).



FOUND WALLET

■ Mr. George Alderson of Altoona was boating at Glendale Lake on August 17, 1968. He had motor trouble and was busy working at it when he noticed he no longer had his wallet in his pocket. He marked the spot by noting the trees along the shore. Keeping in mind the lake was to be drawn down, he told only his wife about the spot where he had lost it. On September 22—34 days later—he found it in the mud. My father, mother, sister and brother-in-law were nearby when he gave a joyful yell to his wife. They said he could have been heard for a mile. In the wallet were all his cards he normally carried and $58.00.—*Waterways Patrolman CLOYD W. HOLLEN* (Blair County).

Those *funny* Opening Days!

by PAUL ANTOLOSKY
Superintendent
H. R. STACKHOUSE TRAINING SCHOOL

THE GRIZZLED OLD ANGLER was sitting on the bank of his favorite trout stream—at the same spot where he had been on opening day for the past 35 years—intently watching his bobber floating on the surface of the rippled water. This year fishermen were everywhere along the small stream and conditions were crowded, to say the least. Opposite the old man, a neophyte angler was wading closer and closer toward the old gentleman. Then when he was about ten feet away, he joyfully shouted, "Hya, Old Timer, how they bitin'?" The old man expertly spat a stream of tobacco juice, shot the newcomer a steely glare and said, "How the !&$°;:°! would I know; you're stepping on my bait!" Peals of laughter erupted from other nearby fishermen and the newcomer made a hasty and embarrassed retreat.

The opening day of trout season in Pennsylvania has become a ritual with many Keystone anglers and, hopefully, it will continue to be a day of anticipation for both oldtimers and newcomers. That fishing is fun is definitely emphasized on the opening day of the season. How can you evaluate the sight of a freckle-faced young boy or girl struggling to impale a squirming worm on a hook, or the joy experienced from a leaping, twisting first caught trout? Just observing this occasion is fun!

Probably one of the most gratifying scenes I have ever witnessed was a father and his five children fishing on opening day. The youngsters ranged in age from about six to twelve and as I watched I was glad to see he had had the wisdom of providing them with decent fishing equipment. When the fish started to bite, three or four of the kids had a fish on at the same time and that's when the fun started—what a sight! The kids were squealing and shouting with excitement while dad scurried from one to the other to help land the fish. Man, he didn't get too wet! After about an hour, the fish stopped biting and peace and tranquility returned to the scene. Father hadn't fished at all but the



look of happiness on the faces of his children had provided him with much greater satisfaction. What a story "Mom" must have heard that night. If you've never tried it, for real fun, take a boy or girl fishing.

Another incident I remember clearly is the time I was checking a couple of fishermen on opening day and a nearby youngster, realizing who I was, yelled, "Hey, Mr. Warden, I caught my limit too; you wanna' see 'em?" I replied, "I sure do, Son," and he proudly and very gingerly laid four trout and four suckers on the grass for my approval. I just didn't have the heart to tell him that he only had four trout. Instead I patted him on the head and told him, "You're a real fisherman, Son." The fact that he was having fun was the important thing, and I wasn't about to dampen his enthusiasm.

On another opening day when I was working as a law enforcement officer, I recall one angler I checked along a mountain stream who, when I inquired as to how his catch had been, triumphantly replied, "Real good, I got six beauties!" He proudly opened his creel to display his fish, but instead of six, we could only see one lone trout. I can't begin to describe the look of bewilderment on his face! Further investigation revealed that there was a hole in the corner of his willow basket and he had apparently lost the biggest part of his catch along the stream somewhere. His main concern was that his wife would never believe him.

Or how would you like to be in on the scene when the "unlucky" angler arrives home? After getting up at 2:00 A.M., waking up all the kids and the wife before he departs on the mighty excursion, driving 200 miles to his favorite stream, and then returning home with only two seven inch trout to show the wife and kids. "But Honey—they just weren't bitin'!, etc., etc." he explains. I've often wondered how many promises of a new dress or a new hair-do have been made by fishermen to console their non-fishing better-halves before departing on an opening day venture.

And how do you figure the guy that checks and rechecks all his equipment before departing on that first day trip and after finally arriving at the stream, finds to his amazement that he forgot his rod? Maybe not so funny at the moment, but I'll bet when he retells the story, everyone listening is laughing.

I suppose what really constitutes fun in fishing is demonstrated by the following example. One opening day I checked an angler for his catch while he was fishing in Spring Creek which, by the way, still harbors its share of large trout. This particular angler had a beautiful catch of eight trout, ranging up to 24 inches. In fact, the smallest one was 14 inches long. And yet, the angler said, "Yeah, they're nice except for that small 14 incher." I walked upstream muttering to myself, "What does it take to please an angler?" The next man I checked, however, really brightened my day. When I asked how his luck was, he told me, "I only caught two trout, but isn't it a beautiful day? Feels good to be outdoors again after the long winter." His broad grin and cheerful manner convinced me that he was the one that was having real fun.

I can recall another time when I was watching a blind young man fishing on opening day along Penns Creek. He was using a spinning rod and having trouble with his bait hanging up in the top guide of his rod. After each cast he would retrieve by winding his spinning reel, but invariably he'd wind too far and his hook would catch in the tip guide. He'd patiently undo it and cast again. I asked if I could be of assistance. Searching through his tackle box I found a large split shot, pinched it on his line about a foot from the bait, and told him to cast. He did, and then started his retrieve and this time, when the split shot stopped at the tip guide, he knew he had to stop winding. After watching him make four or five successful casts, I wished him luck and told him I was leaving. His parting remark to me was, "Hey, Man, this fishing is really fun now!"

Opening day of trout season is always crowded, and after personally observing many opening days, I really believe that these crowded conditions add to the fun of the day. How else can you explain the same people coming back to the same places, year after year? The fact that we are a gregarious lot by nature, permits us to tolerate crowds and even enjoy them. It's pretty much the same as the feeling you share when you're at a big football game and you find yourself talking to the stranger sitting beside you when your team makes a touchdown. Before the game is over, you've discussed the plays, the teams, etc. And most fishermen are pretty much the same, comparing catches, asking each other what the fish are taking, and simply enjoying the antics and humor of each other. These feelings all increase tenfold and the air of excitement quickens when the fish are biting and everyone is having fun.

As for "tasteful" outdoor pleasure, I can't exclude that unsurpassable aroma of frying bacon and eggs, hot steaming coffee, or the taste of a fresh caught trout turned to a delicious, crunchy brown in the pan. Whether you're fishing out of a camp, a pitched tent, or a camper, that kind of living sure adds up to a lot of fun.

Whether it is the excitement you see in the eyes of the youngsters on their first opening day, or the satisfaction of your own enjoyment after your 5th or 20th opening day, I'm sure you'll agree wholeheartedly that the opening day of the trout season in Pennsylvania is great fun for one and all.

And to provide continuous fishing fun is the ultimate aim of your Pennsylvania Fish Commission!

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NEW LIFE—

mining in the State over a hundred years ago, it's simple enough to see that we're not going to lick this problem overnight," Dr. Charmbury said. "But at least through our research—and nobody anywhere knew what a mine water neutralization plant would even look like four years ago—we have begun the first steps towards ultimate total reclamation."

Currently, the Department now has some $18 million committed to 35 projects to either temporarily or permanently abate abandoned mine drainage problems all over the State.

These projects range from simple diversion ditches to by-pass existing water supply reservoirs to treatment plants and complete backfilling projects, such as Little Scrubgrass.

In addition to active field abatement projects on mine water pollution, the Commonwealth's Coal Research Board has also funded some 10 research-action projects into causes and analysis of various mine drainage pollution problems, and totaling another $1.7 million. Several of these projects will be finished by mid-year, Dr. Charmbury says.

To point up Pennsylvania's progress in the past three years alone on this problem, a recently published report from the Federal Water Pollution Control Agency in Washington shows that of the 18 field action-research projects that this Federal agency has financially aided in the past 18 months, 11 of them are sponsored by Pennsylvania's Department of Mines and Mineral Industries.

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TROUT FISHING TYPES

have long suspected that their husbands were odd creatures so perhaps through these explanations they will better learn to live with their problems and maybe even gain some insight to the driving compulsions that turn their handymen-husbands into "trout-chasers."

TYPE 1. This is the "Call of the Wild" fisherman. Far away places are always beckoning to this soldier of fortune. At the mere mention of fish hitting at Lyman Lake in Potter County, this brave piscator has the family bus loaded to the gunnels with enough equipment for an assault on Mt. Everest. He seldom brings anything home, but that does not dampen his enthusiasm for the next time—and there is sure to be one. (This type always lives very near an excellent trout stream which he never fishes.)

TYPE 2. This is "stay-at-home-Charlie," the one stream die-hard. This persistent soul learned to fish on the old Mill Stream. He caught a trout there in 1939, and he refuses to forget it. He fishes the same pool, with the same fly or bait, at the same time—day after day after day after day—. This type seldom catches any fish either, but he's not nearly so hard on the bankroll as type 1.

TYPE 3. This is the "Early Bird." A well known variety who has his neighbors believing that he never sleeps. (Some other types fall briefly into this category on opening day). He is a very noisy individual who invariably awakens the whole household with his preparations. The muffler on his car is always cracked, a quality which endears him to all who live along his route. This chap does catch a trout now and then. Unfortunately, he seldom returns until late afternoon, and by then the poor trout are in a rather dehydrated condition.

TYPE 4. This is the live bait lover. He spends much more of his time procuring creeping crawling things than he does in actual fishing. This amateur zoologist believes that any living creature which can be impaled on a hook is worth a try. He disdains the standard angleworms and minnows. Instead, he is constantly searching for exotic fish food such as cataylpa worms, leopard frogs, black salamanders, baby field mice, green crickets (these are very hard to come by), helgramites and soft shelled crabs. This Frank Buck of the angling fraternity also catches a few trout (they are usually taken on angleworms after his supply of super-secret bait is exhausted).

TYPE 5. Here we have the fly fisherman. He uses streamers, wet flys, dry flies, nymphs, and all sorts of feathered creations as the notion strikes him. His vest always contains at least fifteen or more fly boxes. His off-season time is spent pursuing these boxes to see what more he could possibly add to them. Much time is spent deciding what should be the ideal combination of flies to carry. This fellow is most generally a fly tyer, and a moth in the house is likened to a Chinese invasion. His fish are always taken on a Royal Coachman.

TYPE 6. This is the most hopeless case of all. He is the Tackle Buyer. He does not fish more than once a year, and he usually lives in large cities. His uncontrollable desire to purchase tackle has left him a little punch drunk. It is impossible for him to pass by a fishing goodie counter without investing in another $25.00 worth of assorted knick knacks. They seldom see the water, but he has a great time assorting the flies, changing lines, oiling reels, polishing lures, and such puttering around.

TYPE 7. This is the "gentleman angler." This fellow has passed through one or more of the other stages and he has reached what he considers the apex of trouting He does not deem it sporting if he cannot catch his trout on a number 14 Quill Gordon dry fly. A rising trout will hold him spellbound for hours as he casts mechanically to it. This type will forsake home, family, dog and job when trout are rising. He justifies this by saying that "this may be the best night of the year." This type is also a skillful tree climber. This is caused by the amount of time his fly spends attached to the uppermost branches of the only tree within four hundred yards of the stream.

Undoubtedly, if you are placing yourself, or a fishing associate in one of these categories, you feel that some overlapping will be necessary. Feel free to do this. I have discovered that fishermen are very flexible when being fitted into these types. In fact, as I look this survey over, I discover that I fit into almost all these slots! Where do you fit?

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THE QUICK KILLER

winter. The life preserver must be worn. Flotation jackets which can be worn all the time, replacing the hunting jacket are another answer. All charts showing survival times in cold water are based on men using life preservers or another means of staying afloat.

Extra precaution must be taken when using a boat in cold water. Don't stand up in the boat. Learn to cast from a sitting position. Don't venture out on unfamiliar waters such as fast moving rivers. All boats that venture out of protected harbors or bays to distances exceeding a half mile from shore should have a life raft aboard. Knowing that a person will only have the use of his arms for about five minutes in cold water doesn't give him much chance of survival.

Most important, don't capsize. And this can only be prevented by learning about your boat and how to handle it. Only through education can one become competent in boat handling. You might take a free boating course such as those offered by the Pennsylvania Fish Commission Waterways Division, the U.S. Power Squadron and the Coast Guard Auxiliary.

Only through boating education can the one who survives be you.

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FISHING OUTLOOK

are good bets while Lawrence County has the North Fork of the Little Beaver River which is probably the best there.

Lancaster's Dutch Country has seven miles of the West Branch of Octoraro Creek and Lebanon County's Tulpehocken is good.

Lehigh County offers the Little Lehigh and Luzerne County plenty of lakes and streams and the Lehigh River at Stoddartsville is excellent. Lycoming, in the heart of good trout country has Lycoming Creek, Loyalsock Creek and Muncy Creek—all good bets.

In McKean County's Marvin Creek and Potato Creek get a lot of attention and in Mercer County the Little Shenango River heads the list of trout waters. Penns Creek, well known over the state, heads Mifflin County's trout streams. Monroe County is blessed with many fine streams. Two of the best are the Broadheads and the Bushkill.

Unami Creek in Montgomery County and Mahoning Creek in Montour County are both popular while Hokendaqua Creek and the Bushkill are the best of those in Northampton County. The Little Shamokin Creek in Northumberland and Laurel Run and Little Juniata Creek in Perry are good.

Philadelphia County, even with its huge population, has the Pennypack and the Wissahickon. Good fishing in Pike County can be had at Shohola Creek, Lackawaxen River, Fairview Lake and Lake Wallenpaupack for huge brown trout.

Potter County, said to be the best by many, has a lot of outstanding trout waters. Heading many fine ones are the upper Allegheny River, Kettle Creek, Oswayo Creek, Pine Creek and its branches, and the Sinnemahining and its branches. In Schuylkill County Deep Creek and the Pumping Station Dam are both good. Snyder County has Middle Creek and Somerset County is fortunate in having numerous good trout waters headed by Laurel Hill Creek.

Sullivan County's Loyalsock Creek and the Muncy Creek are good early season bets while Susquehanna County fishermen try Quaker Lake and the Meshoppen Creek. Tioga County's list of streams is headed by Pine Creek through the Pennsylvania Grand Canyon.

Penns Creek as it flows through Union County is good and Little Venango County has three good streams in Oil Creek, Pithole Creek and Sugar Creek. In Warren County many first choose the Brokenstraw.

Washington County has Dutch Fork Lake, Canonsburg Lake and Ten Mile Creek. Wayne County has plenty of good trout waters with the Dyberry and the Equinunk Creeks heading the list. Westmoreland County has Loyalhanna Creek and Keystone Lake and Wyoming County has the Meshoppen and Bowmans Creek. York County's best is probably Muddy Creek.

Before embarking on a fishing trip this year check the 1969 Summary and Regulations booklet. It contains, besides the seasons, sizes and creel limits a listing of all trout waters, boundary water regulations and a complete listing of all the Waterways Patrolmen in the state. It also contains special regulations for certain ponds and lakes and a list of the Fish For Fun and Fly Fishing only streams and their locations.

Good luck opening day!

WATERSHED ASSOCIATIONS

by Walt Peechatka

MANY OF YOU MAY RECALL the story about the college geography professor who asked the following question of his class. "What is a watershed?" A bright young miss in the front row replied, "It's one of the buildings behind the farm house in which the water supply for the farm is stored."

This story may seem humorous at first but in reality it should tell us something. Perhaps if the young lady had been questioned further and about what a watershed association is, she might have discovered that it was a group of landowners who owned these watersheds.

How many of our 12,000,000 citizens know that a watershed is, in simple terms, a drainage area, and that a watershed association is a group of interested citizens who live in the watershed?

Past experience has shown that watershed associations have been the nucleus for coordinating local efforts on conservation, water pollution control, and related watershed activities. With this in mind, representatives of various state agencies are developing an educational program which it is hoped will encourage formation of new associations and strengthen old ones.

The program content includes information on how to form an association, the values of such an association and the problems that may be encountered. A highlight of the program is a slide presentation by a representative of one of the outstanding watershed associations in the country. Illustrated are some of the problems that association encountered and the methods they used in dealing with these problems.

Programs have been presented at 4 regional locations and two more are scheduled. So far meetings have been held at Lebanon, Huntingdon, Latrobe, and Franklin. Two programs now scheduled for April are: April 8—Dallas, Pennsylvania (College Misericordia, Science Building) and April 9—Lock Haven, Pennsylvania (Lock Haven State College, Raub's Hall).

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FISH POWER

fins. There is one on each side of the fish. The pectoral fins are the most dorsal and usually closer to the fish's head. They are also, generally, the most flexible. The other pair are called pelvic fins and are ventrally located.

The pectorals can be used to swim slowly forward or backward, somewhat similar to our breast stroke. This is the only way a fish can swim backwards. They can also be used to keep the fish in one position much the same as we tread water. If one pectoral is thrust out as the fish is swimming with its tail, the fish will pivot around on that fin; or if both pectoral are thrust out, the fish will come to a rapid stop.

These are accessory functions of the paired fins. Their primary function needs a little explanation of fish anatomy. Fish possess an internal water wing called the air bladder. This bladder is filled with gas until the fish is weightless in water. The air bladder is found just above the fishes' stomach. Most of the weight of a fish is forward of this point and above it. If a fish did not make constant adjustments with its paired fins, it would float belly up with its head angled down, just like a dead fish. It is not the death of a fish that turns it belly up, but the cessation of compensating fin movements. When the fish is swimming, the same tendency to turn belly up or angle the head down is in effect and the paired fins act like a submarine's diving planes to control this tendency and also allow the fish to descend and ascend.

To emphasize the importance of these fins, biologists have removed both pectoral fins on an experimental fish. This caused the fish to sink downward at the head and assume an oblique position. Removal of pelvic and pectoral fins on one side caused the fish to roll over to that side. When all the paired fins were removed, the fish turned belly up.

The remarkable sensory apparatus a fish possesses allows it to compensate for some changes. Running down the middle of each side is a lateral line. This line is actually a series of pressure sensitive cells that can detect changes in the fishes position. As long as this remains intact, the removal of one fin can be completely compensated for by the other fins.

This very slight inconvenience to the fish of a clipped fin can be an extremely important convenience to the biologist. Fin clipping is a relatively easy and harmless way to mark fish for management and research studies.

On many fish such as salmon, trout and whitefish, there is a small vestigial fin behind the dorsal fin called the adipose fin. It serves no function, but it is an excellent fin to clip for marking. Sometimes it seems as if that's its sole purpose.

Marking of fish by clipping a fin or by a tag is one of the most useful tools in fishery management. But its success depends solely on you, the fisherman. If you catch a fish marked in one of these ways, record where you caught it, when, its weight, length, what kind it is, what fin was clipped, and if you can, scrape a few scales off its side and press them between some paper. Send this information to the Benner Springs Research Station, R. D. No. 1, Box 200-C, Bellefonte, for the sake of better fishing.

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STREAMSIDE SURVIVAL

the grain is beaten out with a stick. It is dried in the sun or over a fire and the chaff is winnowed out.

More use of this delicate grain would be made if people recognized it.

Shadberries, huckleberries, and cranberries all grow around streams. All provide food and thirst-quenchers to the lost fisherman. All are easily identified.

The shadberry varies in size from a bush to a tree of considerable size. Its small apple-shaped fruits ripen from late July to late August, varying in color from red to purplish and blue-black. They contain ten seeds.

When the berries are cooked, the seeds soften and flavor the dish. In fact, the fruit may be used in any way in which huckleberries are.

Huckleberries and blueberries are fond of growing in wet areas. The true huckleberry is jet black, contains ten large seeds, and grows knee-high in sour, peaty soil near water. It is unusually sour with a distinctive flavor.

In contrast, the blueberry may grow from foot-high lows to the twenty foot high bush. The berry may run from deepest blue to black with a luscious sweet flavor. The seeds are so fine as to be hardly noticeable.

The ripening season runs from the beginning of July for the low-bush to the middle of October for the shade-ripened very highs. The latter may lean over the water to such an extent that the picker has to wade or canoe to pick them.

A person lost in the woods will find in the blueberry both a thirst-quencher, and a food supply which may be eaten raw or stewed. Seasoned with a little salt, the berries are often sweet enough without the addition of any sugar.

Another appetizer when eaten raw is the cranberry. It ripens in October in beds growing on spongy wet hummocks and tussocks. The berry is also found along meandering meadow brooks and in the famous cranberry bogs. While the area around them may be dry, the raker often has to wade for them in the water which has been flooded over them to protect them from the frosts. At this time their color is from whitish-pink to deep red.

Cranberries are not too easy to find. They grow in isolated bogs, deep swamps, and deserted meadows. In addition, they grow on creeping vines not over three inches high, bearing tiny glossy leaves.

The Indians cooked these berries with maple sugar or honey long before the coming of the white man. They were also the first American berries to be eaten in Europe.

Many edible greens grow along watercourses. Some must be cooked. Others may be eaten raw or cooked. Such a one is the cowslip which blooms in April and May. It has deep green succulent leaves with orange-yellow flowers similar to buttercups. The plant grows from one to two feet tall in moist marshes, swamps, meadows, and brooksides. It has been esteemed as a green for two hundred years.

The roots may be cooked as a vegetable, resembling sourkraut in texture. The buds, pickled in vinegar, make a true wilderness relish. And the leaves along with their thick hollow stems produce an excellent green when boiled. The raw leaves must not be eaten because they contain a poisonous glucoside which is expelled by the cooking.

The dandelion is too well known for need of description. This herb blossoms from spring to fall.

Only the large fresh leaves should be eaten as a raw salad or in cooked greens. The boiled roots are said to be the equal of parsnips or oyster plant. The golden blooms make a bitter wine.

In temperate climates, watercress may be gathered every month of the year. This green is at its best when found in cold-running brooks. Pinch or snip off the cress at the surface of the water. Eat it raw or boil and serve it like spinach.

Another meadow green is the sweet flag or calamus. It also grows in shallow water, on pond edges, and along sluggish brooks. The plant has yellowish-green leaves shaped like narrow, two-edged swords. These have cut many a barefoot boy's tender feet. The flower is a dry, fingerlike spike.

In the spring when the stalks are about a foot high, the tightly compressed unfurled leaves in the center of the young stalk are sweet and tender, making an excellent salad. Slice on top of them a quantity of the peeled young stalks to complete the dish, dressing it lightly with oil and vinegar. This salad has a spicy taste and a pleasant aroma.

For a forest tea, consider the sassafras. This shrub and tree grows on sandy slopes next to streams and damp soil. It is easily recognized by the spicy-pungent smell of the broken twigs or by the root-beer odor of its roots.

In addition, the sassafras is easily spotted by its green branchlets and fan-shaped leaves in three designs—"mitten with a thumb;" "mitten with thumb and little finger;" "mitten without thumb."

An aromatic tea is made by boiling the roots in hot water.

A distinctive coffee may be produced by roasting dandelion roots for four hours or until they break with a snap and appear dark brown inside. Use less of the ground material than with coffee. It is better served without cream or sugar.

The seeds of the arrow arum are slightly sweetish, tasting like parched Indian corn. The Indians used them as a substitute for pepper.

The Herb Robert with its greatly cut leaves and magenta-rose flowers enjoys the dampness of rocks. Hunters and fishermen lacking salt have picked the leaves, pulverized them by burning, then used the ashes as a salt substitute.

Finally, as a confection-coughdrop, boil sweet flagroot, cut in lozenge-sized pieces for several hours or until tender. Then simmer the lonzenges in rich sugar syrup for a few minutes. Lay them on waxed paper to dry.

The candied root has a gingery, soapy taste, making a pleasant nibble or a natural coughdrop.

MODERN CAMPING by DEL & LOIS KERR

BACKCOUNTRY CAMPING—

APRIL! THE MONTH WHEN NATURE sits up, yawns, rubs her eyes, then quickly becomes obsessed with transformation into the green-clad freshness of spring.

Back in remote sections of timberland, brookies offer an exceptional challenge at this time of year. Trout are frisky in waters swollen by melting snows. Adding appeal, many headwater and feeder streams throughout the state are seldom visited by anglers.

A stream which heads far away from a road is a good bet. You will probably have a sizable stretch of water all to yourself. In fact, the farther you go on foot, the less chance you will have company. The real way to enjoy such a venture is to walk in, set up camp, and be ready for a full day's action after a comfortable sleep in the outdoors.

Forget the heavy tent, the campstove, lantern and other so-called essentials for camping. The answer here is lightweight backpacking gear similar to that used by hikers. You'll be surprised at how little you actually need.

The best backpacks, not only lightweight, but designed for comfort, cost $20 to $30. Many good units are less expensive but the "open bag" type should be avoided. Units with compartments are far easier to tote over rough terrain.



"I UNDERSTAND YOU'VE NEVER BEEN LOST YET . . ."

We purchased Gerry Vagabond packs for the whole family. Manufactured by the Colorado Outdoor Sports Corporation, the units have side straps for fly rods or other extra gear. The pack has a built-in frame for controlling weight distribution. If carrying heavier-than-normal loads, we add a bit of padding to the frame for total comfort.

Gerry packs are good for all-around use at any time of year. Others equally good are those manufactured by Himalayan Industries, Monterey, California; Kelty Pack, Inc., Glendale, California, and Alpine Sport, Inc., Boulder, Colorado, just to name a few.

If you plan to use a pack just for trips to secluded trout streams, walking distance will probably not exceed four or five miles. A growing number of people have found the Allegheny National Forests, state forest lands and other places off the beaten path provide opportunity for extended jaunts of 40 or 50 miles, possibly longer. If that should appeal to you, selection of the proper pack is important.

Comfort is essential if walking any distance. This is where compartmented packs fill the bill perfectly. Heaviest items should be carried high, at or above the shoulders, never on the lower portion of the back. Sleeping bags go on the very bottom, either inside or outside the main pack.

Another feature to watch for is the ability to adjust the height of the pack without taking it off your back. It should be carried high while walking uphill, lower on the downhill side. With this ability you walk naturally at all times.

A warm sleeping bag is essential for April nights. Goose down bags provide the greatest warmth but are usually expensive and limited to cold weather. The traditional three-pound Dacron bag will be warm enough in most cases. A suit of insulated underwear provides the answer for extremely cold weather.

Most modern sleeping bags do not compress readily. Goose down is an exception. Down that fills 600 cubic inches will compress to 20 cubic inches, perfect for nestling in a backpack. If using Dacron or other synthetic fiber bags, first fold lengthwise, then roll tightly. Sleeping bags carried outside the pack should have a waterproof cover.

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MODERN CAMPING

Ultra-lightweight tents on today's market are nothing short of amazing. Some nylon units are large enough for three or four men, have ample head room for standing and are complete with sewn-in floor and screened picture windows.

We found the Gerry Three-Man Camponaire tent sufficiently large for two adults and two pre-teenaged children. It has a floor space of 6′ x 8′ and a center height of five feet. Tent, fly, telescoping poles (outside) and pegs weigh a total of six pounds, 14 ounces. The whole outfit rolls tightly and occupies only a portion of one backpack compartment.

The Alpine four-man Expedition tent weighs just six pounds and has a floor space of 6′10″ x 8′. Poles are erected inside. Height at center is six feet. Poles and rainfly add an additional three pounds.

Individual one-man tents cut down on both weight and cost. Such a tent will weigh under two pounds and provide plenty of room for storing gear. An advantage here is that less clear ground area will be required.

A lightweight tent not only serves the angler-backpacker, but is ideal for canoe or small boat trips. There are, however, certain problems with outfits of this type. Nylon fabrics do not retain water repellency long after being subjected to the ultraviolet rays of the sun. Plastic coating will prevent leakage from rain but often collects a pint or more of condensation on the inside before morning.

The cure is a simple nylon fly several inches above the tent. Water vapor passes through a non-coated tent surface without condensing. Temperature inside a small tent tightly closed will usually be ten degrees warmer than outside. If additional heat should be required, never use anything but a catalytic heater in an enclosed tent. Fumes could be fatal.

If weather is not unusually cold, you can do without a tent. Insect pests are not prevalent and severe storms are unlikely in April. Many people fashion several sheets of plastic into a simple but serviceable lean-to.

You will need protection from the damp ground at this time of year. This again can be accomplished with a sheet of plastic. It is advisable to have either a small canvas tarp or a backpacker's mattress between the sleeeping bags and plastic.

A topographic map of the area will be worth its weight in dry flies. With such a map you can see just where a particular stream heads, where feeder streams enter, likely spots for beaver dams and other factors which enter into the serious business of catching trout.

A word of caution is in order. Backpacking into a remote campsite near a gushing mountain stream loaded with scrappy brookies could become habit forming. It is an adventure which may take the edge off other types of angling. Imagine waking at dawn, woods echoing with bird song. Soon woodsmoke and brewing coffee mingle with the aroma of pine. Trout for breakfast, anyone?

continued from page 41

When dry flies get wet

landed many. My high riding offering did next to nothing. There were a few swirls *under* the fly and only one nine-incher fell victim to it.

Finally I guessed at what was probably going on. Winter-leaned trout were probably so ravenously eager for the season's first big hatch that they took before flies were completely surfaced. This explained the sub-surface swirling. They had obviously been feeding on the moving nymphs earlier. My morning success bore out the fact. Now, as the flies were emerging, action was approaching the surface.

The situation, then, called for wet flies, fished near the top. But after a long winter the sight of the season's first hatch bred an uncontrollable temptation to fish dry flies, even if I had to let them get wet!

Having rationalized Sam Huffard's bizarre technique I was quick to adopt it. I didn't even dress a fresh Quill Gordon, tied from the ersatz neck. It soon got quite wet. A small trout liked it that way. I took him on my third cast.

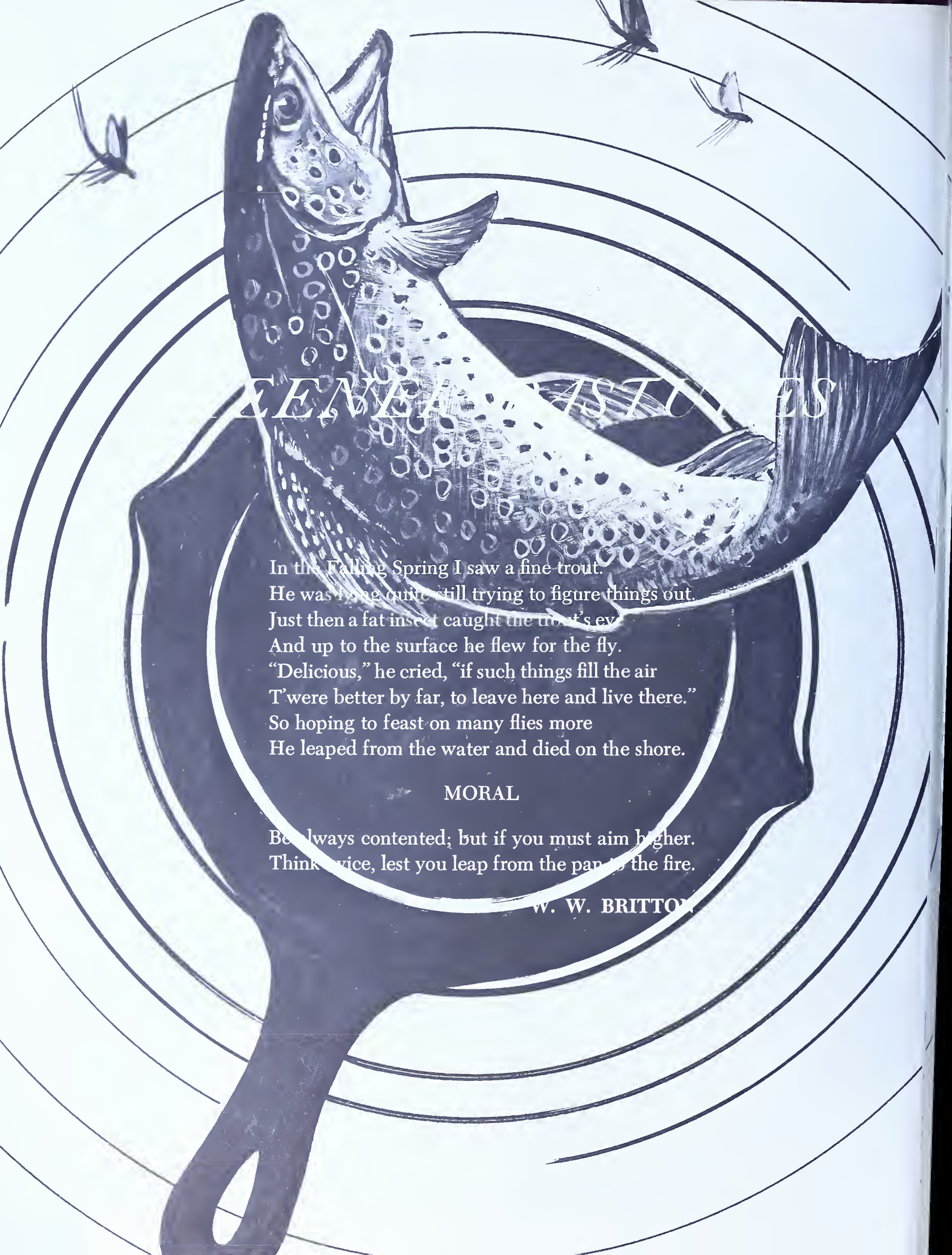
In one of my favorite stretches (I call it the Elbow Pool) a heavy fish was swelling water over shadowy depths, hard against the veering bank. With a pounding pulse, I angled a cast upstream so that a minimum amount of leader would cross his "window" on the drift-back. Evidently the fly rode too far toward mid-stream. I laid it down again, a few feet closer to the bank. In the midst of a slow swirl, the fly was taken. A husky brown smashed noisily top-side in a complete cartwheel and raced to the stretch's riffled head, running my reel for the distance. Then he coursed back. That deep, bank-side cut prevented by blocking the run. So he continued downstream. I jogged along the bank, below him. In a shallow and narrow alley he was successfully headed off. Again the fish moved up, against a strong current. Before reaching the pool, he paused and tried to jump. His vividly marked torso got half-way out. But he sank back. It was easy to drift him to my net.

Perhaps it was because of this game attempt at a last jump—or was it the brilliant coloration that marked him for a native that irrevocably moved me to release him? But release him I did.

The diary tells the rest of the story. "We had heavy action all afternoon with our 'wet' dry flies. Each of us landed over a dozen legal size trout, and I don't know how many were lost. . . . Celebrated with a steak dinner at Mountainhome. Went to Sam's service on Easter Sunday. Was back on-stream alone for awhile in the afternoon. Situation back to normal."

I simply meant that the wet dry flies would no longer work. The same hatch was on again. But fish were taking on top, sometimes spectacularly, in surface clearing leaps. I did very well in proper fashion with the Montague Quill Gordons. For now the trout's tempo was back to normal.

Thus passed another of those special anniversaries. Like others, over the too rapidly circling years, it had its lesson. As I said, the darndest things happen on opening day!



TEN BEAUTIES

In the Falling Spring I saw a fine trout.
He was lying quite still trying to figure things out.
Just then a fat insect caught the trout's eye
And up to the surface he flew for the fly.
"Delicious," he cried, "if such things fill the air
T'were better by far, to leave here and live there."
So hoping to feast on many flies more
He leaped from the water and died on the shore.

MORAL

Be always contented; but if you must aim higher.
Think twice, lest you leap from the pan to the fire.

W. W. BRITTON

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



TROPHY MUSKIE taken by Robert Shaffer at Pymatuning went 51-in , one inch short of the longest muskie taken in the Keystone State in 1968. It was the heaviest of the year weighing 38¼-lbs.



BEDFORD COUNTY'S Yellow Creek produced this limit of brown and rainbow trout for John Patterson of Lilly. He used a fly rod, automatic reel, minnows.





LEBANON FISHERMAN Gene A. Hitz caught this whopper of a brown trout from Lion's Lake on opening day last year. It measured 28¼-in. and weighed 9-lbs. He was using spinning equipment and a dardevle. It won him an Angler Citation.

THOMAS BRINCHEK of McAdoo landed one of the biggest trout caught in Pennsylvania in 1968. This 27½-in. 6½-lb. brownie was caught in Francis Walter Dam with spinning gear and jitterbug in September.

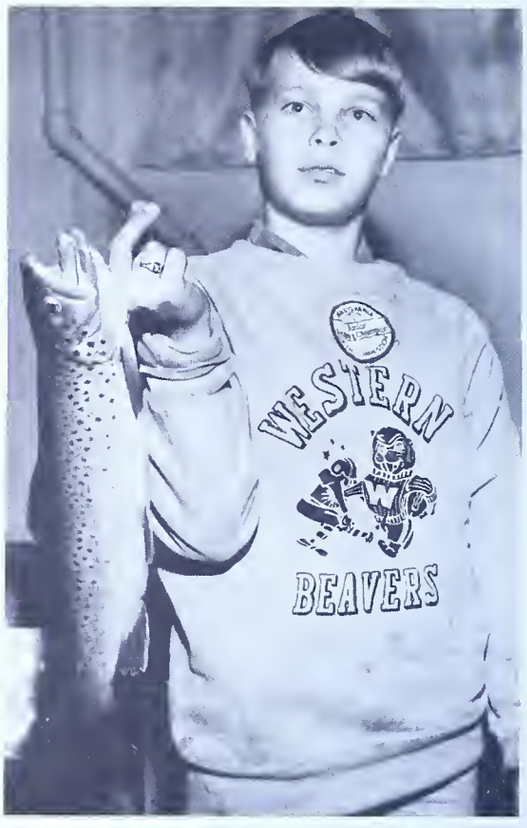
FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



Right—JOE STABRYLA of Pittsburgh became a Junior Citation winner when he landed this 18-in. 3-lb. brown trout from Canonsburg Dam. He used spinning gear when he made the catch in December.

Left—COHO were caught by angler Bob Schoeller of Erie last fall when a few thousand early run jacks began to run. This pair each measures 18-in. and weighed 3½-lbs. apiece when caught offshore from Godfrey Run. Both hit a silver Swiss Swing.





BIG MUSKY caught by James Williams of Hyndman last May. It went 44-in., weighed 21-lbs. when landed from Shawnee Lake. He won membership in the Husky Musky Club.



RAINBOW taken by Dan Tabella, Aliquippa measured 24-in. and weighed 4-lbs. from Sugar Run.



BIG walleye was caught by six-year-old Lisa Foust of Windber. It weighed 4-lbs. and measured 25-in.



FORKSVILLE angler Jim Englert became a Citation winner with this 23½-in. 6½-lb. largemouth bass he landed at Camp Brule, Sullivan Co.



SENIOR Citation was won by fisherman Steve Borowski, New Castle whose daughter Cindy holds the 21½-in. 4¾-lb. smallmouth bass.

DISCOVER HOW YOU CAN WIN A PENNSYLVANIA ANGLER FISHING CITATION!

If you're one of those successful anglers in 1969 who lands a trophy size fish, then you'll probably want to receive an official Pennsylvania Angler Fishing Citation. Find out size minimums as well as other rules by writing: "Citations," **Education and Training Division, Pennsylvania Fish Commission, Box 1673, Harrisburg, Pennsylvania 17120.**



WINNER OF the "Spirt" fishing contest last year was Brookville angler Steve Fiscus who landed this 19½-in. rainbow while fishing popular Cloe Lake.



FISHERMAN NORM SHORTS of Saegertown holds big walleye he landed from French Creek near the mouth of the Conneautee. It stretched 30-in. and weighed 9-lbs. 6-oz. Shorts was using a white jig when he hooked the trophy fish in November.



GEORGE KLINEDINST of York became a member of Pennsylvania's Husky Musky Club when he landed this 41-in. 16-lb. 5-oz. trophy while fishing the Susquehanna River near Brunner Island.



ROYERSFORD fisherman Paul R. Hallman holds this 22-in. 4-lbs. 4-oz. brown trout he caught last spring at Chester County's French Creek.



CLEARFIELD angler Donald Bartley, 14, won a Junior Fishing Citation when he landed this 22-in. 3¾-lb. walleye at Glendale Lake.



JOHN KEELER of Mechanicsburg won a Husky Musky Club Honorable Mention when he hauled in this 35-in. 12-lb. muskellunge while fishing the Susquehanna River in York County. He made the catch late in July.



ANGLER John Hunsberger Jr. of Easton was fishing the Bushkill when he landed this nice 22-in. 1¼-lb. brown trout.



LLOYD KAPCEIVITY of Valiant holds stringer of bass and perch he landed while fishing Lake Erie.



RICKEY MUMMERT, 10, of Westminster holds 28-in. 4¼-lb. northern he caught last fall while fishing Codorus Creek in York County.

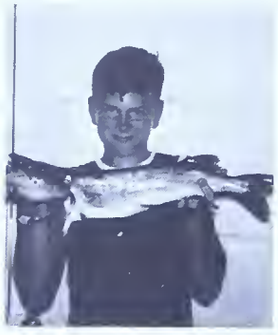


TRACEY WOJCHEHOSKI of Shamokin Dam won a Junior Fishing Citation for her catch of a 34⅞-in. 23-lb., 2-oz. carp from Penns Creek.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



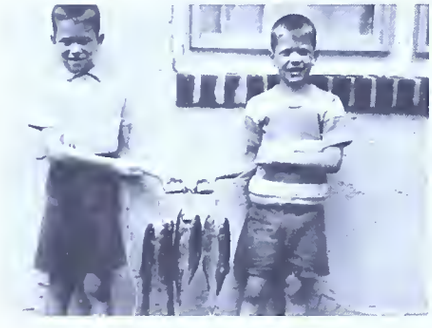




ANGLER Earl Naugle (left) of Selinsgrove landed this 27-in. 7¼-lb. catfish from the Susquehanna River. Chain pickerel was caught at Lake Gordon by Jack Dunn (center) of Cumberland, Md. It measured 25-in., and weighed 4-lbs. Havertown angler Francis Barker (right) landed this 16-in. 2½-lb. bullhead from the Schuylkill River.



PHILADELPHIA ANGLER Carmen Russo was fishing Lake Wallenpaupack when he landed this 3-lb. 19-in. brown trout. He was drift fishing.



BROTHERS Danny and Larry Keifer of Cornwalls Heights hold nice stringer of trout, bass and suckers they landed while fishing the Neshaminy Creek.



BARRY CORKLE, 15, of Highspire landed this 34-in. 11-lb. musky that won him a Junior Citation as well as a Husky Musky Club Honorable Mention.





PAUL HAERTEL, left, of Clifton, N.J. won a Junior Citation for the 24-in. 3-lb. 11-oz. chain pickerel, while Brian Cain, right, of Williamsport also won a Junior Citation for this 19-in. 4-lb. brownie.





JUNIOR CITATIONS were awarded to 11-year-old Louie Price, left, of Salit for 20-in. largemouth bass and 12-year-old Gregory Adams, right, for 27¼-in. carp.



DENNIS HILL, third from left, of Johnstown won both a Junior and Senior Fishing Citation when he caught 15½-in. 2-lb. bullhead. Fishing pals not identified.





FISHERMEN Tom Rowan, 15, left, of Brockville and Mark Witmer, 12, right, of Biglerville both won Junior Citations when they each landed trophy fish.



SHAMOKIN angler Clem J. Dadurka won a Senior Citation for this 21¾-in. 4¾-lb. smallmouth bass. Bait was a minnow.



LANDSDALE angler Freddie Mason, 12, won a Junior Citation for this 18-in. 3-lb. largemouth bass caught on a Rebel.



MECHANICSBURG angler, 5-year-old Scott Keeler won both Junior and Senior Fishing Citations for 11-in. rock bass.



LEWISTOWN'S Larry Sweitzer opened the season right last year when he landed this beautiful brown trout.







FISHERMAN JIMMY REDDINGER of Mayport, left, landed a big northern pike while fishing Mohoning Dam. It measured 34½-in. and weighed 7½-lbs. Angler Robert White of Albion, center, won a Senior Citation when he landed 22½-in. 5-lb. 9-oz. smallmouth bass while fishing Conneaut Lake. And 9-year-old fisherman Daryl White of Indian Head, right, landed a 20½-in. 4-lb. rainbow that won him a Junior Citation.



HARTSTOWN ANGLER Richard "Red" Williams took second prize in the Genesee Fishing Contest and won a Senior Fishing Citation for his catch of this 21½-in. 5-lb. 12-oz. smallmouth bass.



WATERWAYS PATROLMAN Robert Perry of Columbia, Montour, and Northumberland Counties holds nice stringer of big walleye he caught in his district.



PAUL GEMBERLING holds big catfish he landed while fishing the Susquehanna River. The large "cat" weighed 9-lbs. and stretched 25-in. Bait was not listed.



CONTEST SPONSORED by Big Laurel Sportsmen Clubs of Dysart produced trophy trout for anglers Bruce Mattish, a 19¾-in. rainbow and Rosie Giongfrido with an 18-in. rainbow.





ALLIQUIPPA angler Charles Jones, left, holds seven large fresh water drum, three largemouth bass, and two perch. To the right Bobby Headings of Sharon holds 26¾-in. 5-lb. northern.





FISHERMAN Ralph Hewitt of Fayettsville, left, holds 26¾-in. 8-lb. 2-oz. walleye while Marlin Snyder of Levittown, right, holds 42½-in. 23-lb. muskie he caught at Shawnee Lake.



SEVEN-YEAR-OLD Sheila Bentz of Annville won a Junior Fishing Citation for her catch of a 19-in. 3½-lb. largemouth bass caught from Memorial Lake.





SUCCESS struck twice in Lake Somerset for anglers Fred Schmucker and Lee Weimer, both of Rockwood. Schmucker caught the muskie and Weimer landed the northern pike.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN





PATRICK MILLS of South Fork, left, won a Senior Citation with this perch. Right, David DeMarco, Berwick, won Fishing Citation with carp.



OHIO angler Ben Denly of Cleveland landed this 47½-in. 33½-lb. beauty that won him a Senior Fishing Citation and Husky Musky Club membership.

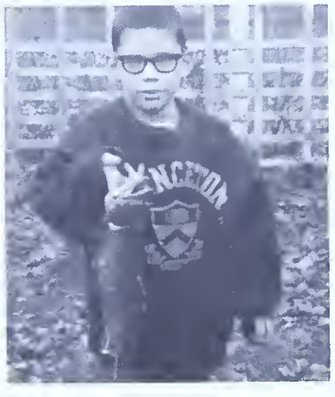


FOURTEEN-YEAR-OLD Ray Combine of Sharpsville won a Junior Fishing Citation when he landed a 27-in. 4-lb. northern pike from the Shenango River.

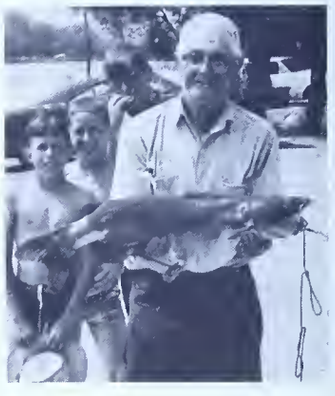




RONALD YURIC of Allentown, left, holds 18¾-in. 3-lb. brown trout that won him a Junior Citation. On the right Pittsburgh fisherman Paul Hudec holds the fish that won him an Angler Citation.



NEWVILLE angler Joseph Myers, 7, holds brown trout he caught on opening day of winter season from Opossum Lake.



BIG CATFISH was landed by angler Arthur Hall of Linesville last summer. It measured 31-in. and weighed 14½-lbs.



HONESDALE fisherman Andy Duley and sons Butch and Bucky with the 23¼-in. 6½-lb. largemouth bass that won him a Pennsylvania Angler Citation.



ANGLER Myron Williams holds big rainbow he caught at Harveys Lake. It went 17½-in.



MERTZTOWN fishermen Tom Laudenslager and John Miller did okay on the Little Lehigh last year on opening day.



FISHERMAN Paul "Boots" Carroll of Conowingo, Md., holds the 20-in. 3¾-lb. smallmouth bass that won him an Angler Fishing Citation.

HUSKY MUSKY CLUB!

Landed a big musky? You may be able to qualify for membership in Pennsylvania's Husky Musky Club! Find out how by writing: **"Husky Musky Club," Education and Training Division, Pennsylvania Fish Commission, Box 1673, Harrisburg, Pennsylvania 17120.**



BERKS COUNTY'S Ontelaunee Lake produced this big muskie for Laureldale angler Walter Eckert. It stretched 39-in., weighed 15-lbs., and was taken Sept. 15. Bait not listed.



CONYNGHAM angler Mark Braskie, 16, holds pair of big largemouth bass he landed in August from the Francis E. Walters Dam. One was 21-in. weighed 7-lbs. and took a jitterbug.



DUBOIS ANGLER John Staus holds the 20½-in. brown trout he caught from the North Fork to take top honors in the yearly Brookville contest.



TIONESTA DAM produced this Citation winning 21⅞-in. 5-lb. smallmouth bass for Butler fisherman LeRoy Fishel early in October.



ANGLER Fred Kahrer of New Castle landed a 43-in. 21-lb. musky that won him membership.



YORK angler John Reynold holds 24½-in. 3-lb. 2-oz. walleye he caught at Pinchot State Park.



NEW YORK STATE angler Joseph Lubnewski of Smallwood with a 19-in. smallmouth and three rainbows, one 18-in. and two 17-in. All took wet flies.



CAMP HILL fisherman 7-year-old Curtis Fullom holds 36½-in. 12-lb. 4-oz. musky he caught fishing Opossum Lake in Cumberland County.



ANGLER V. A. Rihs of Pittsburgh holds 34½-in. 12-lb. northern pike he caught at Conneaut Lake.



LARGE catfish caught by 11-year-old Stanley Bracht of York Haven measured 21½-in., weighed 3½-lbs.



EDINBORO LAKE produced 31-in. 7-lb. musky for fisherman Roger Scarlett of Edinboro on his first time out. He caught it about 8:30 P.M., July 6 while trolling.

PICTURES—

All pictures sent to "Fish Tales" should include complete name and mailing address, species of fish, date when and location where caught and bait and method used. All pictures must include the fisherman as well as the fish!

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



FISHERMEN Dean Halbritter and Charles Baughman, both of Tyrone, hold some big bass. Four of the bass weighed over 4-lbs. each and together the six totaled over 22-lbs. Bait and location not listed.



FISHERMAN Mark Palko, 10, of Natrona Heights caught his first musky from the Allegheny River. It won him a Junion Citation as well as Husky Musky Honorable Mention.



NICE CATCH made by fisherman Jim Reader of New Brighton, all within 45 minutes on the North Fork of Little Beaver Creek.

RETURNS—

All pictures used in "Fish Tales" can be returned directly to the angler, only if complete name and mailing address are included on the back of the photograph.



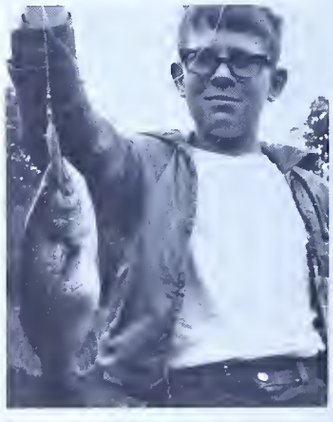
READING angler Floyd Berkemeyer won a Senior Citation for his 39½-in. 14½-lb. northern, from Lake Ontelaunee.



HANCOCK New York angler Charles Hawkins holds two big pike. One weighed 11½-lbs. the other weighed 10½-lbs.



BIG CARP caught by angler Walter Papieredin of Philadelphia. Steve and Stacy Coates stand with the trophy catch.



SOMERSET angler Lee Brubaker landed 14-in. largemouth to win first prize in a contest there. It fell to a rapala plug.



LARGEMOUTH bass caught by David Loeffler of Levittown was 19-in. and weighed 3-lbs. Caught in late September.



BIG BROWN trout measured 22½-in. and caught by Anthony Polisky Jr. of Elmora. Area where caught not listed.



JAY GABLE, Lebanon, landed 20½-in. 3½-lb. largemouth while fishing Memorial Lake. It won him a Junior Citation.



SHARON angler Mike Shayuth, Jr. won a Junior Citation for the 28½-in. 5-lb. northern caught in Shenango Reservoir.



LARGE carp was caught by 15-year-old Daniel Altif of Allentown. It measured 28½-in. weighed 12¾-lbs.



ROCK BASS caught by Sunbury angler Larry Biddelspach, 8, measured 10-in. It won him a Junior Citation. Worm used.



CATFISH caught by Steve Tate of York measured 22-in. weighed 3-lbs. 6-oz. Caught at Muddy Creek, lower York Co.



GAL ANGLER Joan Reitz of Hegins had luck fishing Hazard's Pond. She landed this nice 25-in. 3¼-lb. pickerel.



YOUNG lady Dorothy Himes of Folcroft won a Junior Citation in July when she landed 18-in. 3½-lb. largemouth.



BIG BROWNS were caught by William Hersch of Bethlehem at Lake Wallenpaupack. They measured 17½ and 19-in.



MARK LANE, 13, of Erie got a surprise when he hooked a 3½ foot, 9 pound eel at Beachcomber Beach.



LARGE WALLEYE was captured by fishing gal Kathy Kozora of Verona while fishing the Allegheny River.



FISHERMAN Bob Timchak of Wilkes Barre holds stringer of 14 to 20 inch trout and a perch caught at Duck Harbor.



BIRDSBORO angler John Weller, 12, holds 14½-in. Citation winning yellow perch caught at Bear Wallow Pond.



SCOTT LENTZ of Magungie, 9, won a Junior Citation when he landed 12½-in., 1-lb. yellow perch caught at the Paupack.



WARREN fisherman John Newton caught this big 28½-in. 9¼-lb. rainbow while fishing the tailrace of the Kinzua Dam.



NEW CASTLE angler John Fernandez, 9, won a Junior Citation for the 10¼-in. rock bass fishing Bessemer Rod & Gun.



DUSHORE fishing gal Kathy Bohensky landed 27-in. 7¼-lb. walleye fishing the Susquehanna near Wyalusing.



LEWISTOWN angler Robert Carolus caught 33½-in. 7½-lb. muskie fishing the Juniata July 24 on a gold spinner.

CASTING WITH THE CO·OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

GROWTH—



NORTHEAST Hunting and Fishing Club's project is Kolbe Raceway, built for rearing Coho in Erie County. Harbor Creek Boy Scout Troop 151 helped build the picturesque new raceway.



LITITZ SPORTSMEN'S Association auxiliary nursery on Lititz Spring is used for rearing trout for Lancaster County. Tony Adams, Bob Koch, and Elmer Bomberger are shown sorting trout for stocking later.

GROWTH IS THE NEW KEY WORD to add to the word *cooperation* in discussing the cooperative nursery program these days. In 1967, 60 some clubs had cooperative nurseries; this represented 31 counties with over 350,000 legal trout being raised and released.

Today there are 82 active cooperative nurseries, representing 68 organizations and 35 counties. The gain in trout produced will be quite significant. Let's take a closer look at the growth of this program.

First of all the new nurseries and organizations sponsoring them: From Cameron County, there is now the Bucktail Rod and Gun Club Nursery. The Northeast Hunting and Fishing Club, Erie County, have activated the Dean Nursery and the Kolbe Raceway. Also from Erie County, the Three C. U. Trout Association have increased their holdings by adding the Gaybrook Run Nursery, the Redding Farm Nursery and the Ruppert Drive Spring Nursery. The Nicholson Sportsmen, Wyoming County's first, is now active.

Farther south and east, Cumberland County has added the Shippensburg Fly Fishers Club Nursery and the Mt. Holly Fish and Game Association Nursery. The Adamstown Rod and Gun Club Nursery is a new one in Lancaster County and the Lititz Sportmen's Association have added a new nursery on Lititz Spring. There are two new facilities in Lehigh County, the Unami Fish and Game Protective Association and the Zionsville Community Fish and Game Association. Perry County enters the picture with sites established by the Blain Sportsmen's Association and the Millerstown Sportsmen's Club.

Several of the above clubs finished their projects ahead of schedule and, not content to wait for Commission fingerlings, purchased trout from commercial hatcheries to get started.

Many clubs have taken serious steps to establish nurseries in 1969. Bob Brown, Cooperative Nursery Coordinator, reports the following clubs under consideration: From Region Two: Blair County Game, Fish and Forestry Association; Cresson Community Sportsmen's Association; Dysart Sportsmen's Club; Hastings Sportmen's Association; Thompsontown Sportsmen's Club; and Quemahoning Rod and Gun Club.

From Region Three: Jim Thorpe Sportsmen's Association; Beaver Township Rod and Gun Club; Consolidated Sportsmen of Muncy Creeks; North Montour Sportsmen's Association; Blue Ridge Sportsmen's Club; Central Conservation Club; and the Union County Sportsmen's Club.

Finally from Region Four: Knouse Foods Nursery, an addition to the Adams County Fish and Game Club; Kemp-

ton Rod and Gun Club; the Ontelaunnee Rod and Gun Club; the Slatington Skeet and Sporting Association; the New Bloomfield Sportsmen's Association; the Jefferson Sportsmen's Club; and the Peach Bottom Fish and Game Association.

Not all the growth is with the new clubs; there were 14 nurseries that closed their doors for various reasons that primarily centered around water problems. Most of these clubs are eager to get back in business. A good example is the Sykesville Sportsmen, Jefferson County. The club had operated its nursery for 12 years and then lost the property lease at the death of the owner. To date they're on their fifth site looking for good water. No luck yet, but the boys are still trying.

Growth has gone in another direction, too. The species being raised are no longer confined to traditional brooks, browns and rainbows. Coho salmon, steelhead and lake-run rainbow have been successfully reared and released by the Three C. U. Trout Association and the Northeast Hunting and Fishing Club in Erie County. These clubs started with eggs, another step forward.

The Pennsylvania Fish Commission's role in the cooperative nursery program has been an ever increasing one. Robert H. Brown's position of Cooperative Nursery Coordinator was established in 1965. A full time assistant coordinator, Paul Byers, was appointed last year. In addition the Waterways Patrolman force and technicians and drivers from the various hatcheries are available to the cooperative nursery clubs. Potter County Anglers, for example, used three commission vehicles and drivers for their mid-winter stocking of about 30,000 trout.

Meetings, planning sessions, tours and training have all been added to the Fish Commission's participation in the program. Waterways Patrolmen are trained in nursery management.

There's no question about adding the word *growth* to the word *cooperation* if you're *Casting with the Coops* on one of Pennsylvania's trout streams this spring.



HARBOR CREEK Boy Scout Troop 151 at the Kolb Raceway, which they helped build at the Northeast Hunting and Fishing Club grounds.



ANNUAL EVENT is cooperative nursery tour of one of some Commission hatchery, held in 1968 at the newly remodeled Huntsdale installation in Cumberland County.



TRAINING OF Waterways Patrolmen, includes instruction in organizing and operating cooperative nurseries. Members of the last class of patrolmen are shown here visiting the Morris Rod and Gun Club Nursery in Tioga County during their training period.



LARGE GROUP of cooperative nursery people are shown here during the 1968 tour of Huntsdale. Most of this group came from Lancaster County although club members from throughout the state attended.



FACILITIES OF CLUBS vary greatly. Shown here is the Bald Eagle Sportsmen's Club house near their nursery ponds. Many facilities are neither elaborate or large, but all produce trout for stocking in Pennsylvania's public streams.



PENNSYLVANIA ANGLER JUNIOR CITATION WINNERS Dwight Romberger, Ronald Yurcic and Frederick Williams are presented with their Citations by Special Waterways Patrolman Stanley Long of Lehigh County. Romberger won his Citation for a 21½ inch shad taken in the Delaware; Yurcic caught an 18¾ inch brown trout from the Little Lehigh; and Williams landed a 21¼ inch brown trout from Lake Wallenpaupack.

WIN AN AWARD FOR CATCHING A TROPHY FISH IN PENNSYLVANIA!

If you're one of those hot shot fishermen who manages to land a trophy fish in Pennsylvania during 1969 then you may be eligible to receive one of the most distinguished fishing awards given in the Keystone State. One of the following awards could be yours!

*** JUNIOR FISHING CITATION**
*** REGULAR FISHING CITATION**
*** HUSKY MUSKY CLUB MEMBERSHIP**

For complete information about rules and regulations governing these three awards write the **Conservation, Education and Training Division** of the **Pennsylvania Fish Commission** at **Box 1673, Harrisburg, Pennsylvania 17120**

WATCH NEXT MONTH'S ANGLER FOR A LIST OF 1968 WINNERS!

ANSWERS TO CROSSWORD PUZZLE

ACROSS

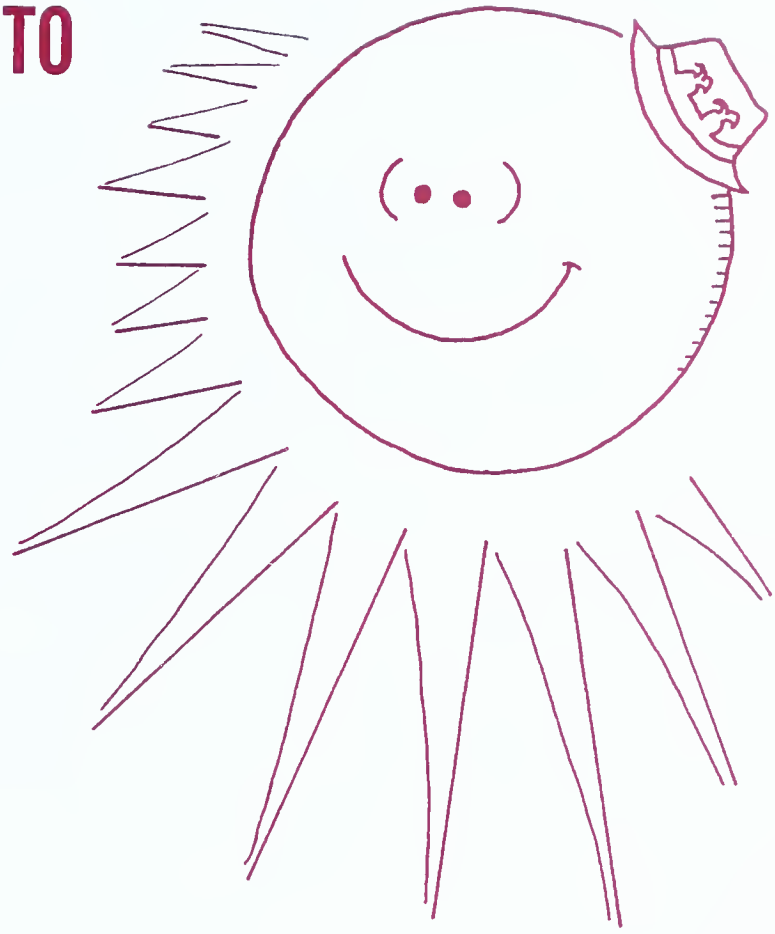
1. Abeam 2. Amidships 5. Fore 6. Stow 10. Line 11. Afloat 13. Fenders 15. Pump 16. Tack 20. Roll 21. Oil 23. Bend 24. Lee 25. Tarp 28. List 30. Tide 31. Cockpit 32. Luff 35. Wake 36. Spar 39. Red 41. Transom 42. Flare 43. Anchor 45. Pitch 48. Scupper 51. Jacket 55. Bearing 56. Fuel 58. Bollard 61. Points 62. Chart 63. Frame 64. Belay 66. Hatch 67. Freeboard 68. Gunwale 69. Jib

DOWN

1. Aboard 2. Aye 3. Draft 4. Stern 6. Starboard 7. Pin 8. Painter 9. Clinker 12. Aft 14. Dry rot 17. Astern 18. Keel 19. Cleat 22. Pliers 23. Bail 26. Ratline 27. Bilge 29. Thwart 33. Flag 34. Helm 36. Stem 37. Rudder 38. Current 40. B-1 44. Camber 46. Tiller 47. Hull 49 Carvel 50. Port 52. CG 53. Bulkhead 54. Lights 57. CME—Courtesy Motorboat Examination 58. Bow 59. Buoy 60. A 65. Cowl

BRING SOME SUNSHINE INTO
THE LIVES OF ALL THOSE
FRIENDS OF YOURS WHO
ENJOY PENNSYLVANIA'S
MANY WATERSPORTS

HOW?



HELP THEM DISCOVER

PENNSYLVANIA ANGLER

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BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

From A. L. C., Uniontown:

"The styrofoam floats on my dock on the Youghiogheny River are riddled with holes after only one season; what is causing this and how can I prevent it?"

—Your problem is muskrats, which seem to have a great liking for styrofoam. The only successful remedy is to wrap the floats in hardware cloth—galvanized wire mesh of ½ inch spacing, such as is used in making cages for small animals.

* * *

From W. L. D., Pittsburgh:

"What is the best way to repair leaking seams in an aluminum fishing boat of riveted construction?"

—The only method that offers much chance of success is silver soldering. Try to find a sheet metal shop that does aluminum ductwork, or you can buy the solder and special flux and do the job yourself with a propane torch. Be very careful not to apply too much heat, as you could melt the thin skin of the boat.

* * *

From R. W. S., Gallitzin:

"What is meant by a 'One Design' sailboat?"

—In order to avoid the endless difficulties of handicapping, sailboats are generally raced by class; that is, Stars compete against Stars, Comets against Comets, and so forth. All of the boats of a given class, regardless of who manufactured them, are of one design, having the same waterline length, sail area, and weight. This theoretically insures that the winner of any race will be the best sailor, rather than the owner of the best boat. There are well over one hundred active classes in the United States, each with its national association and member fleets across the country. For specific information on a paritcular class, drop a note to the manufacturer, and he will put you in touch with the class secretary for that boat.



"BEEN IN THE OUTBOARD REPAIR FIELD LONG?"

* * *

From J. E. P., Belleview:

"If I trailer my boat to Canada for a fishing trip, will I need a special permit to operate on their waters?"

—Your Pennsylvania registration will be good in Canadian waters for 90 days, but you will have to get a special fishing license.

* * *

From W. L. K., Pittsburgh:

"None of the marine dealers I have talked to can help me, but I am sure I read somewhere about a chemical that will restore the strength of dry-rotted wood. What is it and where can I get some?"

—The stuff you want is Calignum, made by H. A. Calahan, Inc., 859 Marmaroneck Ave., Marmaroneck, N.Y. 10543. For the stem trouble you describe, order the 4-oz. kit for $4.80, postpaid. This liquid permeates the area of dry rot, then hardens into a plastic and is very effective for small areas where replacement of the bad wood is impractical.

* * *

From G. C. L., Shippingport:

"Why couldn't I tie my boat up to a mooring buoy in the river instead of renting dock space?"

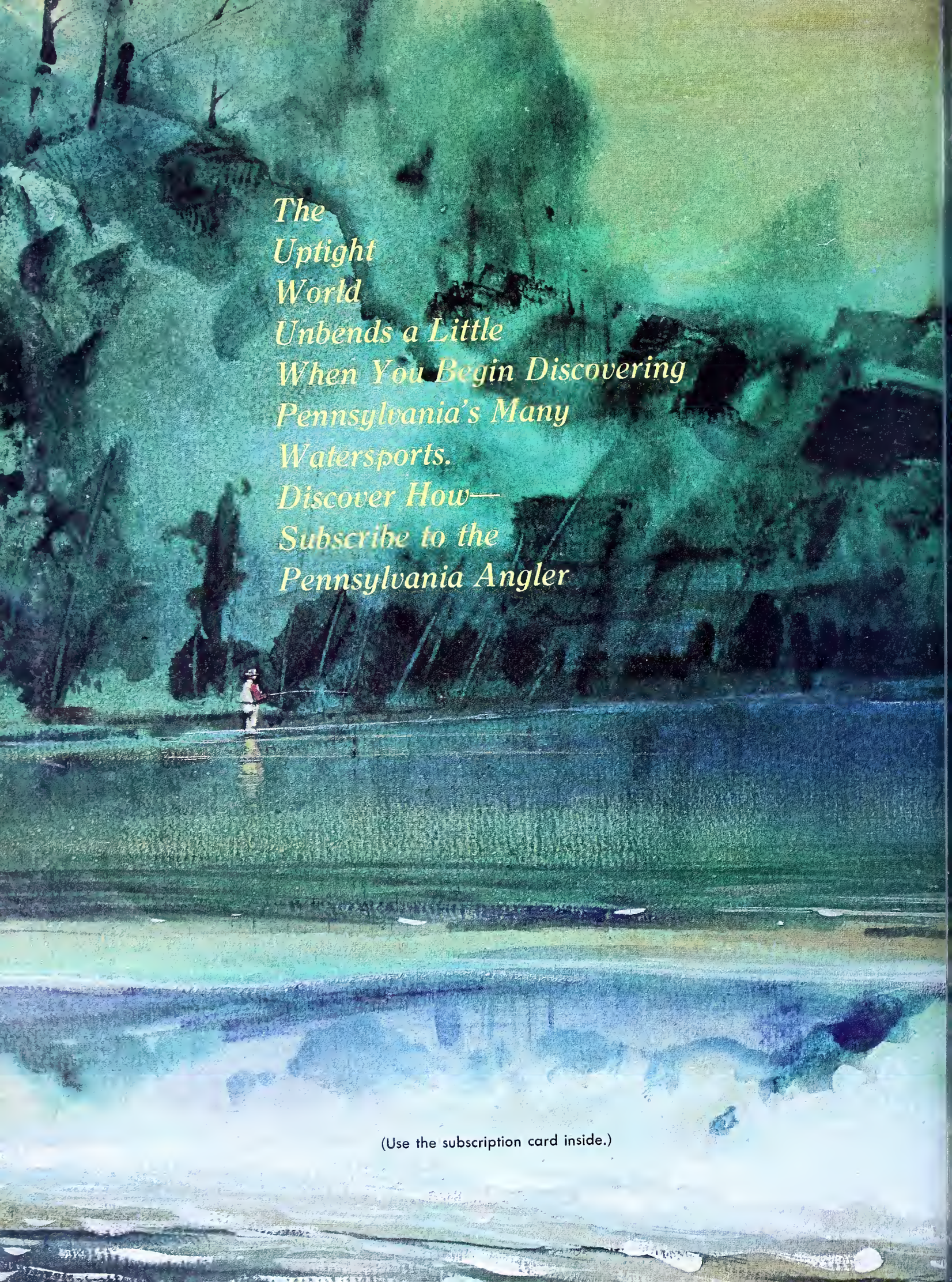
—Provided you obtain a permit from the U. S. Army Corps of Engineers to set the buoy and anchor, there is no reason why you couldn't, although there may be a number of reasons why you shouldn't. There is the problem of getting back and forth from the shore to the boat, which will require another boat, and the difficulty of properly tending the boat and keeping it safe from thieves and destructive vandals For the security alone dockage fees are a bargain.

* * *

From C. J. F., Mt. Lebanon:

"How can I get rid of the dark stains in the mahogany planking of an old speedboat I am restoring?"

—The stains often seen in mahogany are caused by water carrying minerals and other impurities into the pores of the wood where the varnish coat has failed. Get two ounces of oxalic acid crystals from the drugstore, and dissolve in a pint of water. Use this solution liberally on the stained areas to bleach them out, then wash several times with clean water. Sand lightly when the wood is com-



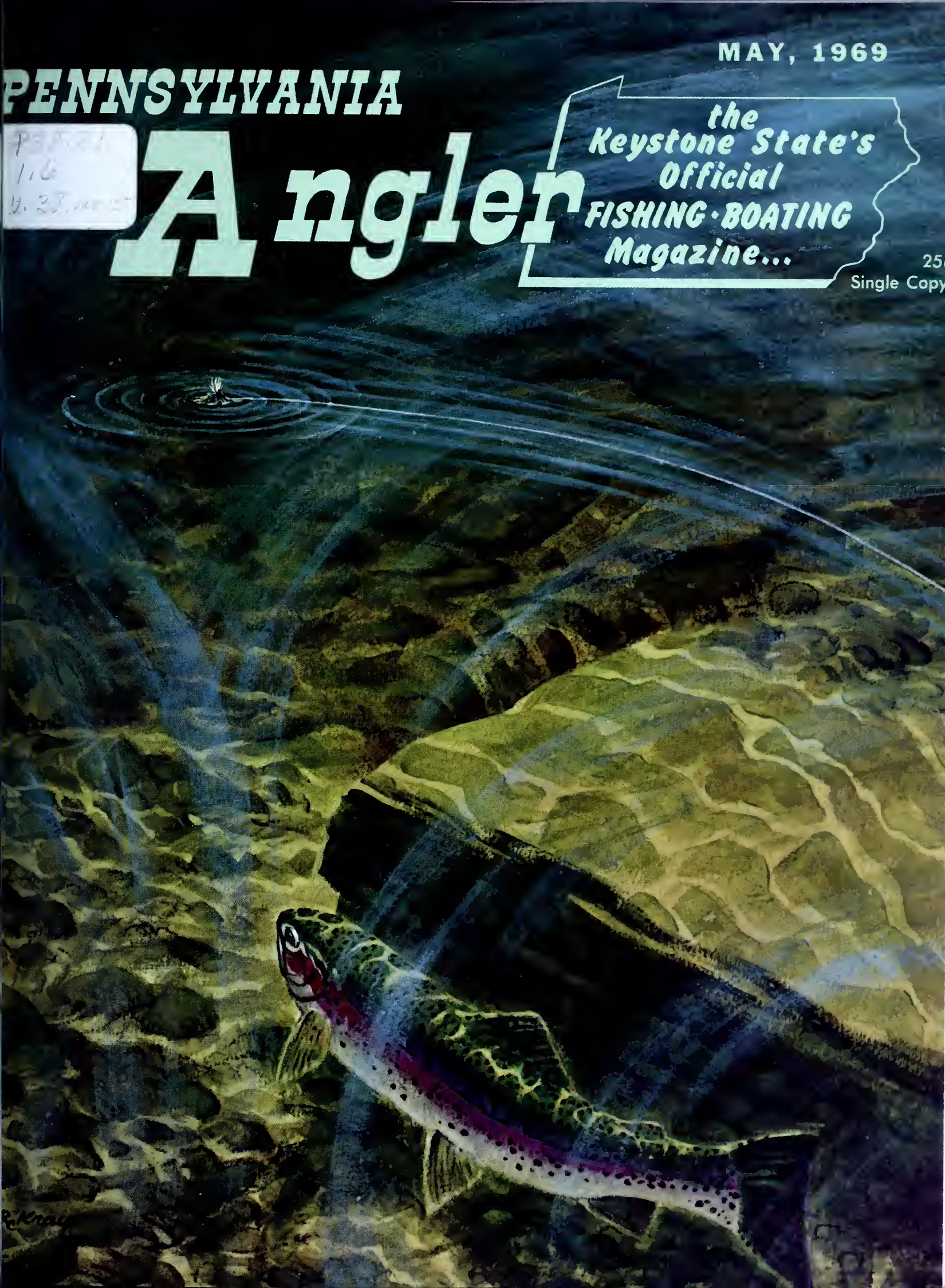
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MAY, 1969

PENNSYLVANIA Angler

the Keystone State's Official FISHING · BOATING Magazine...

25
Single Copy



CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



OWNERSHIP CONFUSION

Our Commonwealth abounds with flowing streams ranging from remote mountain brooks to rivers of all sizes including the Susquehanna, the greatest river on the east coast of these United States.

The beds of a great majority of the smaller streams clearly are privately owned. Confusion regarding ownership frequently occurs on the larger creeks where deeds often refer vaguely to low and high water lines or to the theoretical center of the stream. The beds of our rivers and navigable streams and many lakes are considered to be property of the Commonwealth. Again, the theoretical low or high water level boundary line comes into discussion.

One clear point on this murky subject is that we very urgently need a modern day determination of just where Commonwealth ownership begins and precisely what water courses are included in the public domain. Much the same can be said for a great many of our natural lakes where clear and unquestionable titles to the ownership of the lake beds are rare occurrences.

We must be mindful that our miles of streams and acres of natural lakes are not increasing, but in actuality are decreasing. How? Streams are regularly being shortened through natural and manmade changes that straighten channels, eliminating curves and oxbows. Lakes are steadily filling-in from erosion and the accumulation of debris and organic material and sadly, through deliberate manmade encroachment along the shores.

It has become common practice for both private and industrial waterfront owners to expand their property holdings toward the water, often onto the public waterway domain when added ground is needed. It has become a recognized practice to fill in small bays, marshes and waterfront areas along streams and around our lakes to provide more land. It has become common practice to build private docks that extend out into public waters thereby making the public a trespassor on its own property should they come on such a dock. It is common practice to remove millions of tons of sand and gravel from our river beds each year with no compensation to the public for this encroachment. It has become common practice for private firms to dam our rivers and manipulate them as they see fit in the conduct of their business with little or no return to the public who owns the resource. These are but a few general examples of the growing encroachment on our public waterways that threaten to eventually eliminate or seriously reduce this public resource for any public use.

There can be no doubt that we are long overdue for legislative action to clearly define the public domain and the public right as it relates to waterways, stream beds, lake beds, access to these public lands and the use of these public water resources for private purposes.

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

MAY 1969 VOL. 38 NO. 5

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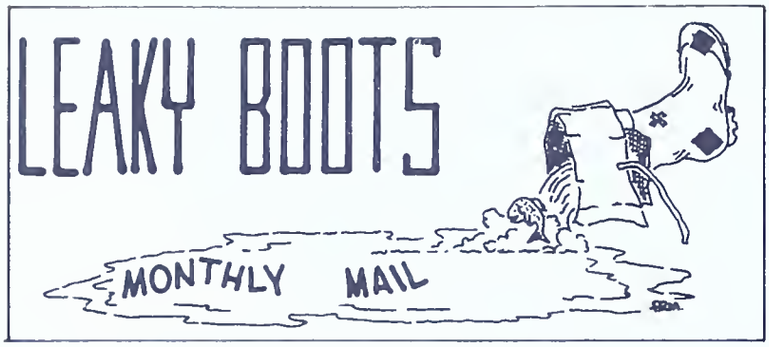
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D. THOMAS EGGLER, EDITOR

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SUGGESTS LOCKS

Gentlemen:

I am old enough to remember the fish ladder that was built at Shenks Ferry. It sure was a flop. All these years I have read about the suggestions to build fish passage facilities, but I have never heard anyone suggest locks. In my opinion the locks would be the solution. Boats could leave Lake Meade and go to Port Deposit and from there to anywhere they desire. While the locks were operating, the fish could come through.

If man can put a man on the moon, I am sure they could put herring, shad and striped bass back in the Susquehanna.

—F. E. Silar, York

ON STOCKING—

Dear Sirs:

I have read the letters in the Angler about trout planting (Put and Take) also (Distressed) and I feel it will do no harm if I add a few lines.

In the first place I think the Commission is doing a very good job stocking our streams. I don't see how there can be a million trout planted in the streams and lakes of our state without some of them being taken easily. On the other hand there are not as many of the freshly stocked trout caught within a day or two as most people think.

I believe a good many trout soon move after they are stocked while a good many fishermen continue to fish where the stocking was made for two or three weeks. When these anglers don't catch anything, they think the trout have been all caught out. And this is when the experienced angler gets good fishing.



Mr. Kommer states in his letter (December issue) that he did not catch any trout in the open streams which he fished the last week of July.

I fished the streams of our state fifty years ago when there were plenty of native trout in most all streams and it was not unusual to go out in July and not catch anything. Yet you could see trout and plenty of them in every pool.

My idea of trout fishing is to get into a stream where you have to work to get them. When you hook one in this kind of going, you enjoy it.

I disagree about all trout stocked in the fall of the year being caught the first day of the following season. I think these trout will be scattered over many miles of the stream, under rocks, logs and overhanging banks. Some of them would be hard to find and harder to catch.

Ellsworth "Elt" Lee, Starrucca

THROW AWAY AGE—

Gentlemen:

The shoppers really have it good in this age of throw away, no deposit, no return. What today is waste and refuse, years ago was an asset—papers, magazines, cardboards, metal, glass, etc.

Before we run out of land and load our environment with waste, why not process this for reuse even if it is at no profit. Let's make a liability an asset. All containers should have a deposit and the manufacturers or retailers should handle this. We live too soft a life and someday will pay and pay dearly for this waste.

Pollution of our land, water and air is to be our great nightmare. Already you can see this. What we need is a movement for clean air, clean land and clean streams and lakes.

Let's give up a bit of the T.V. for something that is worthwhile and will pay big dividends!

—Valentine Botka, Stillwater Valley Conservation Association, Jamestown, N.Y.

ANTI-LITTER PATROL—

Gentlemen:

I also have been an ardent "Pennsylvania Angler" reader for a few years and get great enjoyment out of it.

I volunteered for an anti-litter patrol many years ago. I wrote to the Commission and asked for a badge and paper giving me the right to stop the littering whenever I am fishing. I got a lot of song and dance about having to take a test to get a badge. What test is there to be man enough with a little authority to tell a so-called fisherman he is doing wrong? I spoke up without the badge and almost had action over speaking my piece.

But let's put some of the blame where it belongs, not all on fishermen but on cottagers and picnickers. I've seen a lot of it at Lake Winola where one day I spoke to some kids about breaking bottles and throwing cans in the water.

The people who owned the cottages where I was fishing also owned the children. Result—no more fishing there. So once again I volunteer for the anti-litter patrol and ask for a badge and paper. Mr. Hunter's letter (February) in the Leaky Boots column of the Pennsylvania Angler is right.

—Joseph R. Fogmeg, Scranton

Otherwise nice people, most litterers suddenly become irrational hardheads who refuse to accept the criticism they deserve when someone has the courage to point out the mess they create. Those who litter public highways, parks, streams and streets probably never think of it, but everytime they discard something they also discard some of the money they may have worked hard to earn. Litter in the city of Los Angeles costs the taxpayers who discard it about 10¢ a pound to have it picked up again—four million dollars a year!

Cottagers like those Mr. Fogmeg encountered might keep in mind that the bottles and cans their children toss away don't contribute much to the value of their property—or that of their neighbors.

The Commission cannot legally issue a "badge and paper" to everyone who wants to help fight the litter battle but then one shouldn't be neccessary in order to pass the word that litter is costing the country millions of dollars each year.

People who would like to help make others more aware of just what litter costs, where it comes from, and what can be done about it might do well to write: Keep America Beautiful, Inc. at 99 Park Avenue, New York, N.Y. 10016. Formed in 1953, KAB serves to coordinate the efforts of those interested in fighting the litter battle.

—Tom Eggler, Editor

BOWFIN FISHING

Dear Sirs:

I recently bought a 1969 fishing license and would like to know where is a good water to catch my favorite fish, the dogfish or bowfin? There are a few of them in a river near where I live, but I would be glad to know of a water *loaded* with them. I found they hit plugs with a violent smack and put up a good fight!

The "Amia Calva" can be used as a "game-fish" in populated areas, where by misfortune, the waters may be warm, sluggish, muddy and possibly slightly polluted. A second place where they can be used is in a lake where there are large populations of stunted fish, but for one reason or another, pike, walleye, or musky cannot be used as a control.

In this way the dogfish can become popular.

—Regis Luzeihi, Pittsburgh

You are correct when you say that the bowfin can be used to good advantage for controlling large and stunted populations of panfish. They were stocked in Somerset Lake, Somerset County in 1961 for this purpose, and have apparently done well there. We have obtained young specimens as well as 24 to 26 inch adults during spring trap netting work. However, I would not say that this lake is "loaded" with bowfins.

Black Moshannon Lake in Centre County is another place where this species may be found although, once again, it is not particularly abundant.

Perhaps the best place in this state to look for any great number of bowfin would be Lake Erie, particularly the region around Presque Isle. The lagoons in this area apparently harbor a good population of these fish.

—Clark N. Shiffer, Fishery Biologist

AT ODDS WITH EDIT

Gentlemen:

I had only to turn the cover page of my November issue of "Pennsylvania Angler" to take issue with Mr. Bielo. Does he realize that 47 of our states have "some type of natural resources department?" There remains Pennsylvania and two others with independent Fish Commissions.

It is a well established fact that multiple use is the key word in outdoor recreation management. I advocate maximum use. I am sure Mr. Bielo is aware that many of the best fishing waters in the state are on State Game Lands, Parks and Forests. When I see NO HUNTING signs on State Parks, I am ashamed to think I am a fisherman. This example of greed is the best one I can think of to illustrate Mr. Bielo's motivation to maintain independent status for the Fish Commission.

Has Mr. Bielo read "Paradise Lost" and I am not referring to the literary classic by Milton. Or maybe "Kettle Creek Contaminated," "Anadromous Migration Annuled," "Trout Spawn Thwarted," or "Bass Bluestoned?" Has he ever seen trout dumped at two bridges with seven intervening miles of beautiful trout water remaining essentially barren for fifteen years? What efficiency is he talking about?

If there are over a million hunters in Pennsylvania and 600,000 of us also fish, I fail to see how the independent Fish Commission offers additional benefits, but I can see several disadvantages. I suspect that management associated with record deer and bear harvests, expanded turkey and beaver ranges, increased small game limits, and more hunting grounds could make the waters boil—and not just in hatcheries at feeding times.

A Pennsylvania Department of Wildlife, Fish, Parks, and Forests will bring more and better outdoor recreation, in-

continued on page 26



"MARTHA—THIS IS NO TIME TO CARRY ON FAMILY SQUABBLES!"

COMING - - -

MUSKIE/NORTHERN/WALLEYE/PICKEREL—

May is the month when it all starts happening again for those anglers after the big ones. The season for these prizes of the freshwater opens May 3 and anglers after a real trophy will begin another season of trying to land some of these not-so-easy to catch whoppers. Check your regulations summary for sizes, limits!

SNAKES—

You'll find them in your coming June issue of the Angler! Two major stories will appear. One is called "The Timber Rattler" and will deal with this often feared reptile. The other is called "Snakes Alive" and it's all about a man who isn't afraid of them!

CANOE RACES—

May 17 and 18 the Upper Allegheny Canoe Races are scheduled at Port Allegany. They start Saturday morning at 10 A.M., continue during the afternoon and then again Sunday afternoon. The course stretches over 10 miles of the river. Information? Write: Port Allegany Sport-O-Rama, Inc., Port Allegany, Pa. 16743.

DYNAMITE—

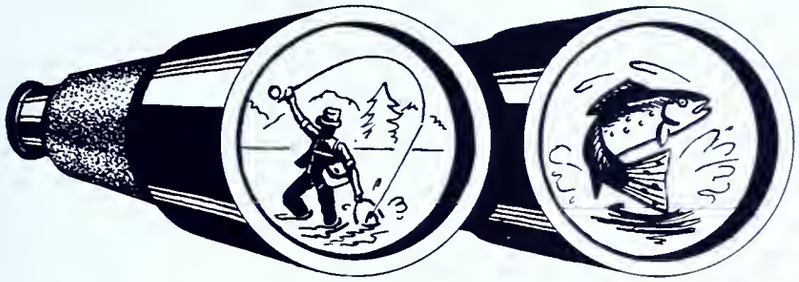
If you enjoy a power boat on Pennsylvania's waterways then you should watch for this knowledgeable article dealing with the dangers of gasoline vapors on a power boat scheduled for publication in next month's Angler. Written by one of the Commission's boating experts, Dean Klinger, it could save your boat—and your life!

MORE BIG FISH—

Continued in your coming June issue of the Angler will be the list of those fishermen who brought in the big ones during 1968. Listed will be all those young anglers who won Pennsylvania Angler Junior Fishing Citations.

TO TROUT—

Fly/Trout fisherman R. T. Trimmer has written an article of fly fishing that should please anglers who enjoy this popular aspect of the fishing sport. It starts in your June Angler and will be continued, so don't miss the first installment!



FISHING OUTLOOK

By-- Stan Paulakovich

IF A POLL WERE TO BE TAKEN to select the fishing month of the year May would get many votes from Pennsylvania anglers, mine included. With the rigors of winter well behind us nature is out-doing itself in its presentations. Trees decked out in their shiny new greens are bursting forth with blossoms of every color and aroma. Birds dressed in their showiest pre-nuptial colors sing to their mates from every nook and cranny. Even our lowly aquatic insects are casting off their pupal shrouds and skittering over the waters in a liberation dance.

As gentle winds and rising temperatures slowly clear and warm the waters, fly fishing comes into its own. Most of our stream insects hatch during this month. They start with the Stone and Caddis Flies, work into the May Flies and the Duns during the middle part and then come the Crane Flies and the Drakes. Hatch of the famed Gray Drake is scheduled over much of the state from the 25th on. If the Gray Drake, also known as the Shad Fly or Canadian Soldier in some areas isn't the king of flies he certainly is a prince.

On a stream such as Penns Creek, just at dusk when clouds of Drakes numbering in the millions rise off the waters, stretches which only minutes before seemed void of any fish life suddenly boil. Dimpling, splashing, flashing trout are everywhere as they gorge themselves on the hatch. To be there and to have the imitation fly is the dream of many fly fishermen throughout the state.

Another of May's highlights is the opening of the walleye, pickerel, northern pike and muskellunge season on May 3rd. Preparations for the opening date should include acquiring suitable sized minnows as bait. Minnows undoubtedly will take the major portion of walleyes, pickerel and northerns this month. Musky fishing calls for the larger minnows or suckers. Bigger lures trolled rather swiftly or cast shoreward and retrieved immediately will be more effective than those fished slowly.

Top pickerel areas in the state are located through Wayne, Lackawanna, Susquehanna, Bradford and Sullivan Counties. The Susquehanna River from the York County area to Sunbury in Northumberland County and the North Branch of the Susquehanna to the New York state line plus the Allegheny River from Freeport in Armstrong County to Warren in Warren County are exceptionally good for walleye fishing. Northern pike hot-spots include Glendale Dam in Cambria County, Ontelaunee Reservoir in Berks County and Sweet Arrow Lake in Schuylkill County.

More actual planning and preparation time will be given to the musky opening date than to the other warm water species. And when a legal musky lies at your feet or is thrashing around in the bottom of the boat, no one will deny that all the preparations were well worth it.

Thanks to careful planning and much foresight on the part of our Commission many good musky fishing waters are scattered over the state. Leading choice of western fishermen and one of the top musky producers anywhere is the Tionesta Flood Control Reservoir in Forest County.

Another top prospect for May is the annual American Shad run on the Delaware River. Early in April as the water temperatures reach the fifties these migratory fishes gather in schools in the Chesapeake Bay. As temperatures rise they head for their spawning grounds on the Delaware roughly 100 miles upstream. These silvery-sided fighters have spent 3 or 4 years of their life in salt water and have attained average weights of 3 to 4 pounds for males and 5 to 6 pounds for females, or roe shad.

Schools of shad surge through the riffles and the flat stretches resting before the next riffle and proceeding ever upstream, making 5 or 6 miles per day. No evidence has been found that these fish feed on their migratory trip. It is believed they strike either in curiosity or in anger.

From Yardley in Bucks County and through Northampton, Monroe, Pike and Wayne Counties as the season progresses fishermen gather at their favorite riffs and cast out shad darts. Most effective are red and white or red and yellow combinations. Four to six pound test line tied directly to the dart without using a swivel has proven over the years to be the best method of taking this fish.

The extremely soft mouth of the shad coupled with the almost unbelievable line-stripping speed of its initial run lowers the ratio of strikes to fish landed. As the line melts from the reel like butter on a hot knife, the natural tendency to tighten the drag or to apply pressure has caused untold grief to many Delaware anglers. A fantastic jumper, the shad will leap and shake until it is thoroughly played out.

Shad are also taken on darts trolled at about 75 feet behind the boat at a slow rate of speed. Fishing with bright gaudy wet flies tied on size 6 or 8 hooks at mid-depths will also take shad. Fly rodders attempting to catch shad should have at least 100 feet of backing attached to the fly line before wetting a line.

This year's shad run based on the fine spawning season of 1965 and return of the young to the sea that fall should be a good one. Water levels must remain just over normal during the critical April-May period to help to combat the pollution problem that exists in the Camden-Philadelphia area of the river.

One more word—while fishing or boating this spring take the lead in litter prevention. Hang onto your trash until you can dispose of it in trash containers.

Everyone will appreciate it!

AS MORE AND MORE PEOPLE DISCOVER THE JOYS OF CAMPING PENNSYLVANIA'S BUREAU OF STATE PARKS, DEPARTMENT OF FORESTS AND WATERS, IS PLANNING NEW CAMPING AREAS AS WELL AS MODERNIZING SOME OF THE OLD ONES. MAYBE IT'S TIME YOU DISCOVERED . . .



NEW CONTACT STATION where campers will register and be assigned a campsite at a new camping area in Gifford Pinchot State Park.

Camping in Pennsylvania's STATE PARKS

IT HAS BEEN SAID that "Pennsylvania's State Parks Have Everything" and certainly camping facilities are rapidly becoming the most prominent.

The trend toward outdoor living, or camping, began before established camp sites were developed within the State park system and, at that time, many camping enthusiasts made use of State forest lands where there are still no specific areas set aside for this purpose.

However, as interest in outdoor recreation grew, and the need for camping facilities in State parks was felt within the Department of Forests and Waters, the Bureau of State Parks began incorporating such facilities in existing State parks and took camping into consideration when launching plans for new park facilities throughout the Commonwealth.

As a result today's State parks—those which offer camping areas—are filled to capacity on weekends. And often it becomes necessary to utilize overflow areas.

Pennsylvania, because of this tremendous growth in just this one facet of outdoor recreation, ranked tenth among all the States in the nation in the number of tent and trailer camp days for 1967 as based on the results of a survey—State Park Statistics 1967—published by the National Conference on State Parks. Of the total number of camper nights in all 50 states, 29,601,519, Pennsylvania's State parks accounted for 1,056,880.

This same survey revealed that Pennsylvania, during 1967, ranked fourth in total expenditures that year, $26,119,056; fourth in capital expenditures for improvements, $11,138,106; fifth for total operation and maintenance expenditures, $4,270,209; and second under capital expenditures for land, $10,710,741.

State park attendance over the past years has continued to grow and each year requires the addition of new facilities to meet the ever increasing needs of the general public.

For example, park attendance, including both day and overnight stays, reached the 31,983,090 mark during 1968. This was despite a wet and cold July which normally is the most active month of the year. During 1967 the total day and overnight stays amounted to 30,868,507.

Providing for the needs of campers has become a full time, 12 months out of the year, task for those personnel involved in operations, maintenance and advanced planning within the Bureau of State Parks.

There was a time, and not too many years ago at that, when primitive facilities were quite suitable for the majority of campers.

Such is not the case today and campers, for the most part, are quick to demand modern sanitary facilities.

As a result, the Central Office personnel involved in planning are taking into consideration the modernization of existing sanitary systems and are including modern, electrically equipped, systems in any new park installations throughout the Keystone state.

At present the camping season opens April 10 and closes December 20.





A TRAILER DUMP STATION and seven new wash houses are all part of the facilities created for the 350 sites at Gifford Pinchot State Park in York County.

It may be well to emphasize at this point, to avoid confusion on the part of the reader, that Pennsylvania's State Parks are open year round and even though the beaches and concession stands may have closed on Labor Day, picnic facilities remain available for Indian summer weekends, the fishing is excellent and, when the snow starts falling, there is ice skating, snowmobiling, skiing, ice fishing and tobogganing.

In 1965 there were 36 State parks which provided camping facilities. These ranged, at that time, from 25 camp sites at Little Pine, in Lycoming County, to 600 at Pymatuning State Park in Crawford County, or a total of 3,370 camp sites. Not included in this total is the Cherry Springs state forest picnic area with 10 sites at that time.

For 1969 this total figure has grown (including Cherry Springs) to 5,222 camp sites with modern sanitary facilities under construction this year at three of the parks: Pymatuning, Laurel Hill and Hickory Run.

Modern sanitary facilities have also been provided at Caledonia, Keystone, Raccoon Creek and Shawnee State Parks; as well as at two brand new camping areas, slated to be opened this year, at Gifford Pinchot and Prince Gallitzin.

Besides providing healthful outdoor recreation it is logical to assume that camping also provides an economical boost to communities in the immediate area.

A survey to determine this factor, conducted in 1963 by a member of the Campground Association of Pennsylvania, revealed:

1. Some 82 per cent of the campers stayed two days or longer.

2. Each family spent an average of $17.78 in the surrounding retail and service establishments.

Camping in Pennsylvania's State Parks isn't limited to tents or trailers. There are also family cabins where all that is required is bedding, food, utensils and you're ready for a week of outdoor fun.

Such cabins can be found at the following State parks: Black Moshannon, Clear Creek, Cook Forest, Cowans Gap, Kooser, Linn Run, Parker Dam, Promised Land, Ralph Stover, S. B. Elliott and World's End.

These are one, two, three and four room structures capable of accommodating from two to four persons comfortably.

Cabins are available only to Pennsylvania residents during the Summer Rental Period which begins the first Saturday following Memorial Day and ends on the last Saturday prior to Labor Day.

Off-season rental periods, which do not require Pennsylvania residency, are from April 14 to the first Saturday following Memorial Day; and from noon on the Tuesday following Labor Day to December 20.

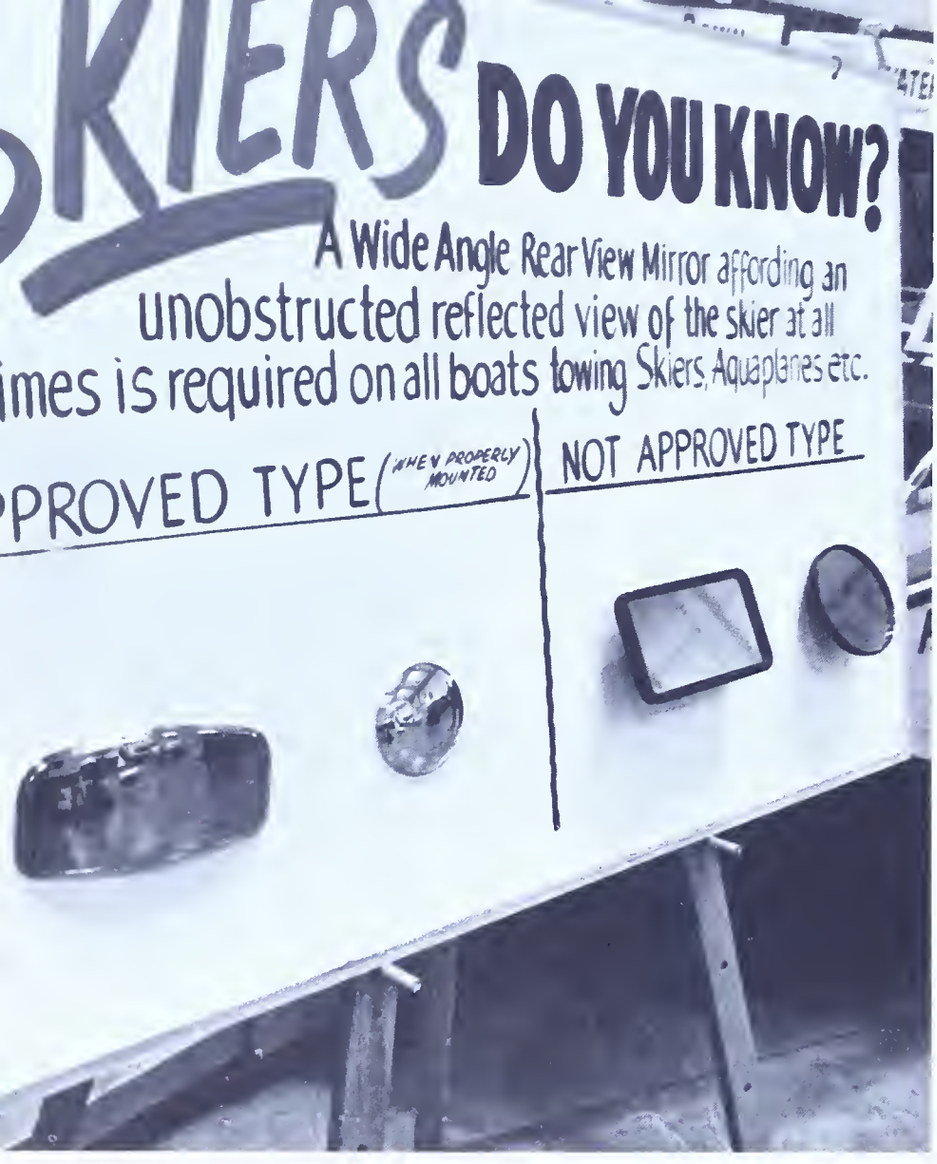
Based on the returns of the aforementioned "State Park Statistics—1967" the average state has been providing camping facilities for about 25 years and that, on the average, each state has 26 parks with camping facilities and a total of about 2,090 individual camp sites.

Thus Pennsylvania, with 42 State parks all offering camping privileges and a total of well over 5,000 individual camp sites for 1969, falls well above the national average which is proof enough that "Pennsylvania's State Parks DO Have Everything."

by
Robert G. Miller
Chief
Public Relations
FORESTS & WATERS



CAMPERS BY the thousands flocked to Prince Gallitzin State Park in Cambria County during the summer of 1967 for the national meet of the National Campers and Hikers Association. Temporary facilities were prepared at the park for the event, but by the end of the summer it should have 437 sites, second in size to the 600 sites at Pymatuning in Crawford County.



by ***DEAN KLINGER***
Chief Marine Services Specialist

THREE NEW RULES FOR SKIERS

1. *All boats towing skiers must be equipped with an approved type wide angle rear view mirror.*
2. *A pickup boat must follow when three or more skiers are being towed.*
3. *The pickup boat must display a ski safety flag.*

Ski Safety



Three new regulations governing water skiing on Pennsylvania's waterways are in effect this year as Keystone State skiers begin another new "season." Each of the three regulations is designed to provide the water skier with additional safety while pursuing the sport.

Beginning this year all boats towing skiers must be equipped with an "approved type" wide angle rear view mirror even if an observer is also aboard. A pickup boat must follow when three or more skiers are being towed and the pickup boat must be equipped with a ski safety flag.

With the rapid increase in ski activity on the waters of the Commonwealth it is only natural to expect the number of ski accidents to increase but in looking over accident statistics it is impossible to find even one that could not have been prevented if common sense had been used both on the part of the operator and the skier.

For example on a beautiful Sunday afternoon early last season a few friends were enjoying their favorite sport—water skiing. As the day progressed and everyone had a few refreshments the operator and the required observer became quite involved in conversation. In the midst of the gab session the observer noticed that the skier was no longer behind them. Swinging the boat around the pair traveled approximately five miles downstream before finding the body of their companion floating backside up with a ski belt on. Needless to say this could have definitely been prevented had the boat been equipped with a rear view mirror so the operator could have seen that the skier was no longer in tow even though the observer had fallen down on the job.

Another example might be the case of the couple that wanted to go skiing but did not have an observer along. They made the mistake of picking up an acquaintance that had a different interpretation of ski hand signals. The simple signal for a left turn was mistaken for a right turn by the observer. The operator made a sharp right turn and whipped the unprepared skier right into a pile of large rocks on the shoreline. The 50 mph plus impact resulted in a near fatality. The use of a wide-angle rear view mirror might also have prevented this.

Why is a pick-up required when towing three or more skiers?

The simplest answer to this question is that by having a pick-up boat everyone involved can have a much more enjoyable time—not to mention safety factors. When three or more skiers are behind one boat and one drops off the operator has the choice of keeping on going and letting the first who dropped float in the water to become a prime hazard to other boats navigating in the area or he can swing around dropping the remaining skiers and start all over, a process which can normally take from a few minutes to a half hour. Under this system a whole afternoon can be spent trying to get in a short time of actual skiing.

Take a look at the same operation with a pick-up boat. When a skier is dropped the pick-up boat moves in, retrieves the downed skier allowing the remaining skiers to continue. This method rewards the more experienced skier with much more skiing time while at the same time it gives the beginners experience in multiple skiing.

Why is a Ski Safety flag now required for the pick-up boat?

First a description of the flag—it is a white flag with a red stripe diagonally from the lower left to the upper right hand corner (color of flag and stripe is exactly opposite of divers flag) and an imprint of a pair of skis is shown on each side of the stripe.

When displayed by the pick-up boat, the flag indicates to other boaters in the area that the boat may be stopping to pick up dropped skis or downed skiers. Other traffic can give it a wide berth.

What does approved type wide angle rear view mirror mean?

This is a rear view mirror which is convex in shape and allows the operator to have an unobstructed reflected view of the skier at all times. It must be understood that a skier can cover a large area not only behind but on either side of the boat and a flat mirror, regardless of how large it is, will only reflect what is directly opposite it and not to either side. It is therefore not of an approved type.

Summing up the new skiing regulations it is safe to say that to the great majority of safety oriented water users these regulations are not actually new, but are instead common sense regulations they may have used in the past to promote safety afloat.





Kettle Creek

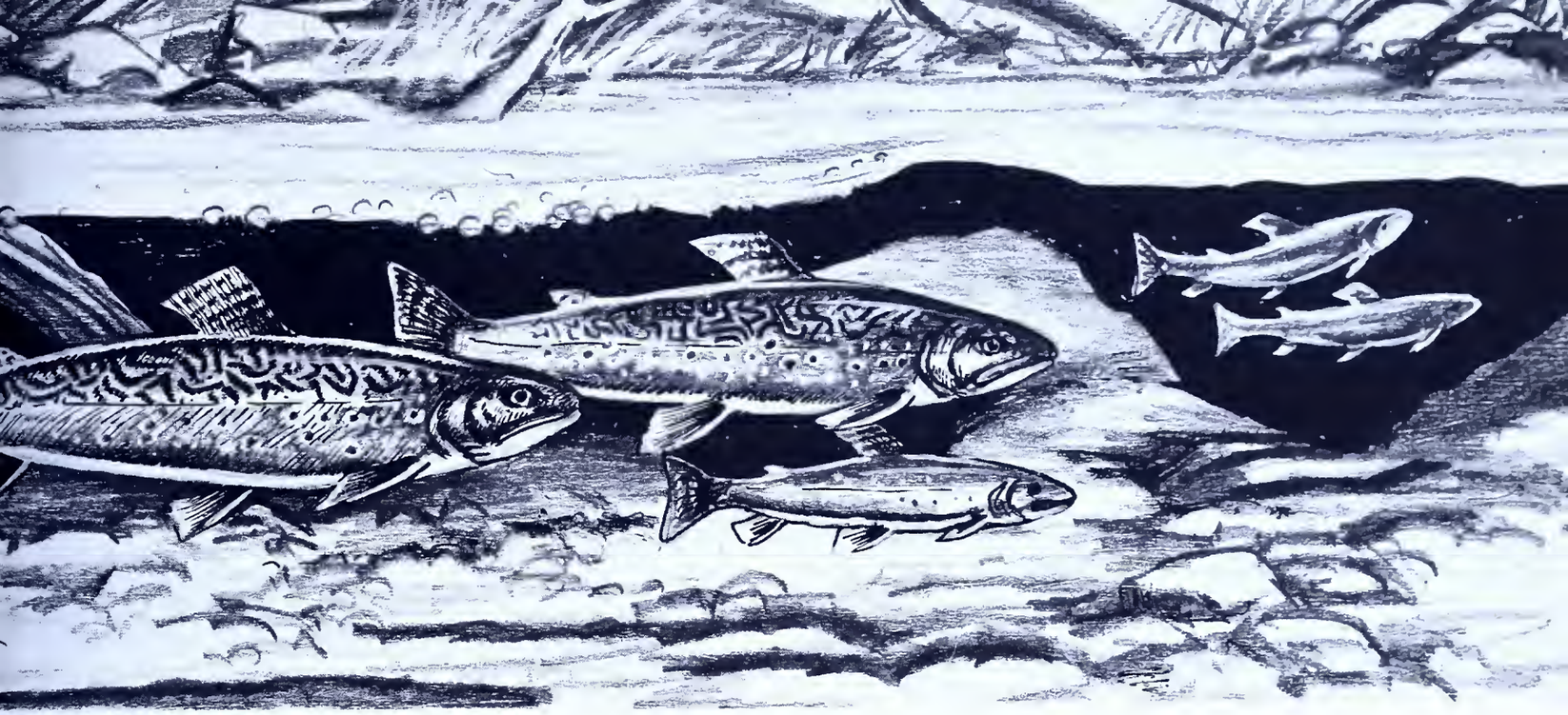


by Don Neal

THERE AREN'T MANY LEFT anymore who can remember the old days on Kettle Creek when the brook trout migrations upstream in the spring of the year drew excited troutsters from all sections of Pennsylvania and congregated them at such famed fisherman's retreats as Olsen's and the Trout Run hotel. The news that the brookies had started their annual run spread like the proverbial wildfire throughout the state and it was an odd railroad coach heading in the general direction of Renova that didn't carry at least one or two passengers with rod cases strapped to their luggage.

These brook trout "runs" were truly remarkable. So much so, that back in the late 1920's either the biologists of the Pennsylvania Fish Commission or Pennsylvania State College spent an entire summer studying how the trout worked their way up the main stream and the tributaries in the spring, and their way back downstream in the fall. Mostly, it seemed, the time when the migration would start and the progress it would make towards the headwaters would depend on the temperature of the stream. If a warming trend would start the trout moving, a sudden cold spell would hold them almost stationary until the warmth would return.

I remember that as a general rule we could figure the run would be in the vicinity of the Trout Run hotel by Memorial Day. A week later, the best fishing would most likely be found somewhere around the mouth of Hammersley's Fork. Then the best fishing moved upstream on a dependable daily schedule, and in a matter of time advanced to Cross Fork, Olsen's, and eventually into the uppermost tributaries. As most of the fishermen moved right



along with the migration their numbers alone indicated the progress of the run at any particular time.

These were great days of trout fishing on Kettle Creek. And while large numbers of the fishermen depended on natural baits to bring them luck, the fly fisherman was far from being a stranger on the stream. In addition to many of the local fishermen who had discovered the pleasure of fly fishing, most of the visitors who came to fish the waters of the Kettle were fly fishing enthusiasts.

Wet flies were the order of the day. While much of the talk that batted around during the evening sessions on the porches of the fishing retreats related to the "new" art of dry fly fishing, there were few of the fishermen of that day who had tried this form of trout enticement. And there were far fewer still among them who didn't consider wet flies the ultimate in catching trout and were fully convinced that they could take more trout with the sinkers than anyone ever would with a floating fly. They had their own methods for dealing with trout feeding on the surface.

And, from what I can remember I would have to agree that they could. For almost everyone of them were true experts at flipping a cast of three wet flies out on the surface of a pool or riffle and manipulating them in a manner to bring a strike from the most reluctant of the feeding trout. Not always on the forward flies that sank below the surface, but just as often on the dropper as it skipped along dapping itself on the surface.

Trout were plentiful then and I remember that many of the fishermen were highly displeased with the fact that a limit of only twenty-five trout per day kept them from filling their baskets to the brim with the fifty or sixty trout they could easily bring to net in a day's fishing. And some would even complain that fishing on the creek wasn't what it used to be for their fathers or grandfathers had told them of the time when a day's fishing would yield the troutster from 200 to 300 trout if the water conditions were right.

Yet fishing the stream and creeling a wealth of its handsome hemlock trout were sometimes the least of the pleasures. Some of my fondest memories center around those wonderful acquaintances seated at the supper table after a day astream, and the bragathons that continued afterwards well into the dead of night. Those sessions produced a brand of fellowship the modern trout fisherman may never know. For where in our modern world would a fisherman ever find retreats to equal Olsen's and the Kettle Creek hotel now that good roads and fast transportation have obliterated their kind?

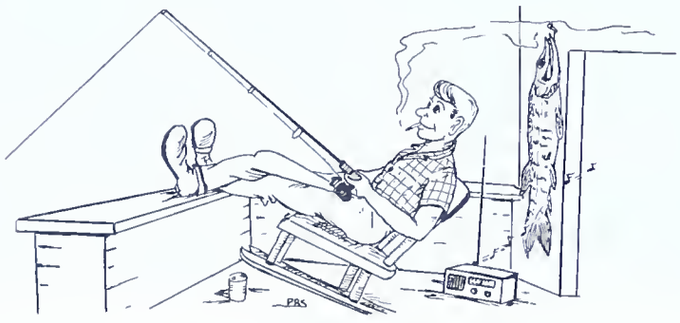
And where would one ever meet up with the likes of Rube Kelly, the Wykoff boys, or a dozen other of the rustic natives who made a trip to Kettle Creek as worthwhile as all the speckled beauties swimming in the creek's crystal waters?

Yes, the old days on Kettle Creek are hard to forget. Much harder, even, than the old days on many of the other of the state's famed fishing streams. For off in the backcountry as it was (and it certainly was in those days), its fabulous spring run of brook trout possessing a magnetic appeal that was almost unresistable, and its wild beauty entrancing the very soul of man, the Kettle drew to it the wholly dedicated from all of the trout fishing fraternity. Like the faithful journeying to Mecca they came, and with a question in their hearts—what fly are they taking today?



Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



BACK YARD MUSKIES

■ Mr. James Yetter of Port Royal, Pennsylvania journeyed from his home to the St. Lawrence River year after year in hopes of landing a legal musky—without success. Last summer he began fishing the Juniata River at the mouth of Tuscarora Creek quite extensively. On July 9 he certainly was a jubilant angler as he landed a 32-inch musky. Three days later while fishing in the same area, he landed a second, this one 35-inches. And only about 300 yards from his back door!—***Waterways Patrolman RICHARD OWENS*** (Mifflin-Juniata Counties).

RAT TRAP

■ While on night patrol awhile ago, I came across a fisherman with three rods and lines, but clearly within the law. Two of the lines were baited with worms and in the river, the other with cheese and cast on the shore for rats. A *mice* way to spend an evening!—***Waterways Patrolman JAY B. JOHNSTON*** (Bucks County).

SUCCESSFUL "SUCKER" FLY

■ One of the best early spring flies used in Fisherman's Paradise that is easy to tie and for which material is easy to come by tied with either white or yellow yarn looped on a hook and is fished like a nymph. The fly imitates the spawn of the sucker.—***Waterways Patrolman PAUL F. SWANSON*** (Centre County).

FAST FOX

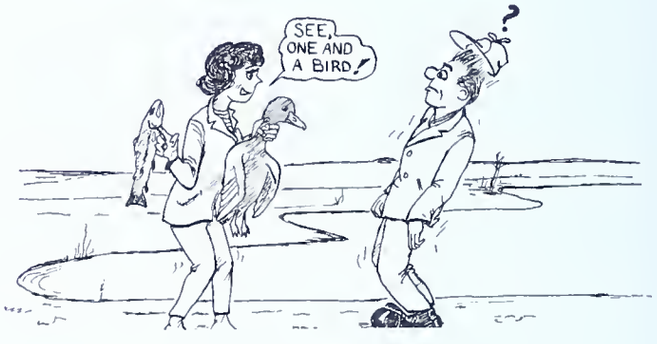
■ A friend of mine had been bothered by a groundhog near his garden so he proceeded to watch for it with his gun. He killed the groundhog but before he could pick it up, a gray fox picked it up and ran into the nearby bushes.—***Waterways Patrolman WALTER J. BURKHART*** (Monroe County).

NEVER BEEN CHECKED

■ Officer Kopena and myself watched a fisherman fishing for approximately half an hour before we checked him for a license. When checked, he didn't have one and was arrested. This was on the Clarion River in the Forest County section. The fisherman said that he had been coming up that way for 13 years and had never been checked by any officers so this time he decided to fish without a license.—***Waterways Patrolman BERNARD D. AMBROSE*** (Elk County).

FIVE MILE HIKE

■ During January, I conducted a fishing school in Rochester (Beaver County). Among the students were two brothers from Monaca—Gary, 9, and Jim Stauffer, 15. After the first session, Mr. Len Szafaryn, Director of Beaver County Recreation, brought to my attention the fact that these young lads had walked about five miles to attend the school!—***Waterways Patrolman DONALD PARRISH*** (Beaver County).



HUNGRY DUCK—

■ Bob David of Big Run, an avid winter trout fisherman, told me that while fishing Cloe Lake near Punxsutawney in early December he asked one woman how she was doing. She replied "One and a bird." It seems she had caught a nice brook trout and on the next cast a duck decided to take her minnow. It must have been quite a battle releasing the bird because her husband was complaining of duck "bites" on his fingers and hand.—***Waterways Patrolman STANLEY G. HASTINGS*** (Cameron County).

TROUT TRAPPER?

■ While trapping for muskrats and mink, Paul Buchsen was surprised one morning to find a 19 inch brown trout



in one of his conibear traps. I knew conibear traps were deadly on fur-bearing animals, but didn't know they would work so well on fish life!—***Waterways Patrolman KENNETH ALEY*** (Potter County).

LOST TEETH!

■ During the drawdown of Glendale Lake last fall many area anglers were able to restock their tackle boxes with lures they found. While walking the shore line one day, I noticed something white in the sand. A closer look revealed it an upper plate of someone's false teeth. Apparently the teeth accidentally were dropped overboard, or was someone perhaps trying to rig up a new lure?—***Waterways Patrolman ANTHONY MURAWSKI*** (Cambria County).

LITTERING PROBLEMS

■ While at the Cincinnati show it was interesting to talk with conservation officers from other states and hear the problems they have. It seems littering is a big problem no matter where you go. I learned a couple of states have a $25.00 to $500.00 fine for littering. A fine of $500.00 might make a potential litterbug stop and think before throwing cans, bottles, or papers along a stream!—***Waterways Patrolman CLOYD W. HOLLEN*** (Blair County).

LICENSED NON FISHERMAN

■ While visiting an issuing agent I met a Mr. George Kochis who was looking at the various tackle. When he saw my uniform he approached me and asked if he needed a license to row a boat. I told him that this is no longer the law, so long as he didn't fish. Then Mr. Kochis floored me—he told me he had never fished in his life but buys a license every year just to row the boat for his brothers. This has gone on for the last 25 years! As I left Mr. Kochis assured me he would again have his license this year. I guess there are still some people in this world that stand behind worthwhile organizations, even though they get nothing out of it. ***Waterways Patrolman ROBERT E. FASCHING*** (Lackawanna County).

SUCCESSFUL OPENER?

■ On the first day of buck season and the first day of winter trout season last winter Mr. Harold Mickey of Orrstown killed a spike buck in the forenoon and then caught his limit of trout at Letterkenny Reservoir in the afternoon.—***Waterways Patrolman BRYCE CARNELL*** (Adams-Franklin Counties).

FISHED OUT?

■ I often hear complaints from fishermen that the streams are "fished out." They say we never have a carry-over of trout from one season to the next and claim that the fishermen who do not follow the hatchery truck cannot catch anything. I was able to disprove these statements last fall while helping the Benner Spring Research Station staff at the headwaters of Big Spring Creek here in Cumberland County. While doing some research on a native strain of brook trout by employing the use of an electro-shocking device, we were able to count in excess of 150 native brook trout in less than a 500 yard stretch of the stream. Many of these trout were over 15 inches in length and some of them would have provided a fisherman with a Pennsylvania Angler Citation Award. To the best of my knowledge a hatchery fish has not been stocked in this section of the stream in the last eight years. In addition to the native brook trout population, this same area has produced three Citation brown trout and one Citation rainbow trout within the past two years.—***Waterways Patrolman PERRY D. HEATH*** (Cumberland-Perry Counties).



SPIRIT NOT DAMPENED!

■ The walleye run in the Susquehanna River at Sunbury brings out hardy fishermen in force to enjoy their sport while braving the elements, and "hardy" you must be to endure the snow, sleet and cold, but even they must bow to fisherman Joe Berholtz of Danville. Joe, pursuing his sport to the limit, ventured out onto Shamokin Dam and was rewarded for his effort by a fall from the dam into the icy waters of the Susquehanna. This of course dampened his clothing and tackle, but not his spirit. The very next day found him back at his favorite spot in quest of the abundant walleyes!—***Waterways Patrolman ROBERT J. PERRY*** (Columbia, Montgomery and Northumberland Counties).

HELPFUL

■ At a fishing school in Bedford a fisherman told me he was fishing at the Shawnee Lake and on two occasions had large fish hooked—so large in fact that they would not come through the six inch hole he had cut. In the process of cutting the hole larger another fisherman told him that the law permitted only a six inch hole. The informer then graciously cut the line and released the fish for him each time. You should have seen his expression when I told him a ten inch hole was permitted by law! He was quite disturbed.—***Waterways Patrolman WILLIAM E. McILNAY*** (Bedford-Fulton Counties).

"TOUCHING THE ADVENTURES and Perils which we, the said Underwriters, are contented to bear and take upon us, they are of the Seas, Men-of-War, Fire, Lightning, Earthquake, Enemies, Pirates, Rovers, Assailing Thieves, Jettisons, Letters of Mart and Counter-Mart, Surprisals, Takings at Sea, Arrests, Restraints and Detainments of all Kings, Princes and Peoples, of what nation, condition or quality soever, Barratry of the Master and Mariners and of all other like Perils, Losses and Misfortunes that have or shall come to the Hurt, Detriment or Damage of the said Vessel, &c., or any part thereof; excepting, however, such of the foregoing Perils as may be excluded by provisions elsewhere in the Policy or by endorsement."

This may sound like a college exercise in Elizabethan English II, but it is really a verbatim extract from a marine insurance policy issued by an American company in 1968 to cover a 17-foot inboard runabout.

The point in all this is to demonstrate that marine insurance is not a simple subject, and no literary sleight-of-hand can make it so.

Many a pleasure boat owner has found to his regret that what he thought was covered by his policy was not, or that by his own actions he has voided his coverage.

No article of this length, or even a single book, can hope to explore the intricacies of marine insurance. No boat owner, unless he happens to be an expert in the field, can tell from reading his policy what is covered and what is not.

If this sounds rather hopeless, there is a solution for the problem. It is simply that a boat owner, in order to obtain the right insurance coverage at the right price, must deal with an agent or broker who is competent to handle this kind of insurance.

The fellow who sold you the policies on your home and auto is probably a nice guy, but the chances are he is just as ignorant as yourself when it comes to marine insurance. To get the right kind of protection, it is necessary to deal with an expert.

There are literally hundreds of different ways to insure a given boat. A small outboard might be covered by the owner's Homeowner's policy, but this affords relatively little protection, although it usually costs nothing extra.

It is just as easy to get too much insurance, for too high an annual premium. The experienced marine broker, by making a careful study of the boatman's situation and all of the factors involved, can select the right policy, and recommend realistic limits for hull and liability protection that keep the premium to a minimum.

Too many boatmen make the mistake of thinking boat insurance is the same as automobile insurance. It is not even remotely similar, and particularly on navigable waters, will be considered in the light of federal, rather than state law.

While even the most superficial discussion of marine insurance would take many pages, there are a few suggestions that will enable a boat owner to obtain and keep the best kind of protection:

1. Get your policy from a broker or agent who is recognized as an expert in marine insurance; tell him everything about your boat and boating habits, as the failure to disclose any relevant fact can void your coverage.

2. Maintain your boat properly, with all required equipment, keep it seaworthy, and never take more passengers or cargo than the boat can safely carry. Never use an engine larger than that recommended by the manufacturer of the boat. The insurance company will not assume the risk of this kind of exposure.

3. Operate your boat sensibly and legally. Learn the Rules of the Road and all other regulations applicable to the waters where you will be boating. Illegal operation that results in a loss can often preclude a recovery.

4. Don't leave valuables lying in your boat where they can be picked up by a passer-by. Most policies cover only losses caused by "assailing thieves," which means essentially that some force must be used in the theft.

5. Don't use your boat outside the area of navigation specified in your policy, or beyond the dates listed for the season, without first informing your agent.

6. If you have a loss, you are required to do everything possible to minimize it, just as if you had no insurance at all. The boat owner who negligently compounds a small casualty by his inaction is in for a rude awakening.

7. If you are involved in an accident with another boat, or if someone is injured by or on your boat, give the other party your name, address and boat registration number, and inform him that you have insurance. Never admit liability, or make any promise you are not personally prepared to fulfill. Few boatmen are competent to make on-the-spot determinations of liability or fault, and your rash statements may be binding upon yourself, but not upon your insurer.

8. If you have a claim, get in touch with your agent at once. You can generally make such repairs as are necessary for the preservation of the vessel, but the insurance underwriter will want to have his own surveyor or adjustor examine the boat before accepting liability.

9. Don't try to make any extra money on a claim, and don't let the boatyard or repairman try either. Your policy only binds the underwriter to pay the "reasonable cost" of losses caused by covered risks, and a reasonable settlement is always more profitable than a long law suit.

To sum up, a boat owner can best obtain the protection he needs by dealing with an experienced agent or broker who more or less specializes in marine insurance, and can serve his own interests best by being completely frank and honest with him.

In any dealing with marine insurance, be sensible and reasonable, keeping in mind that marine underwriters are fair and just, but can be very difficult if they have reason to believe that you are trying to take advantage of them.

In contrast with the situation in the auto insurance industry, which is characterized by inflated repair bills and ever-higher premiums, boat insurance is a bargain. A boat owner can obtain a great deal of protection for himself and his craft at a reasonable rate, generally only a fraction of what a comparable automobile policy would cost.

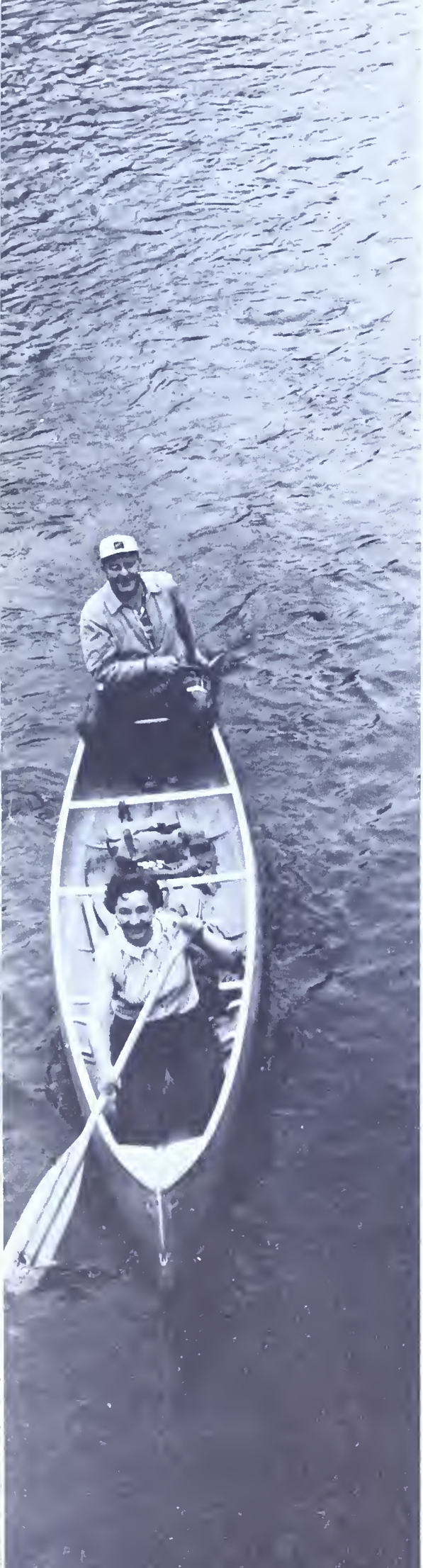
It should be kept in mind, however, that insurance companies are not charitable institutions. When the auto claims exceeded the amount paid in premiums, everyone's rates went up. If boat claims evolve into the same kind of dishonest game, every boatman will pay his share.

INSURANCE— IT CAN MAKE YOU *Sink or Swim*

by Capt. Jack Ross









SIXTEEN OF the 22 members of the Audubon S
in for the excursion.

Audubon On Oil Creek

LAST SPRING 22 MEMBERS of the Western Pennsylvania Audubon Society floated 10 miles of Oil Creek from the Drake Well Park near Titusville, Crawford County, to Rynd Farm. The society was interested in the birdlife inhabiting the famous oil valley.

When the trip ended after six hours, James Wolf of Pittsburgh, the society's president, reported the canoeing bird-watchers had not only seen and heard 30 species of birds but had also found that Oil Creek is an ideal stream for the beginning canoeist.

Because conditions were quite dry in Northwest Pennsylvania, Oil Creek did not present its best spring canoeing stage and several members had to get out and guide their aluminum craft through rocky riffles. But a few of the 11 canoes made the trip without any occupants getting their feet wet.

The canoes were carried easily to the creek near the Drake Well Park Museum. They were taken out just below the Route 8 bridge at Rynd Farm. The trip, with breaks for lunch and bird observation, took six hours. The canoeists floated past the ghost oil towns of Miller Farm, Shaffer, Pioneer, Funkville and Petroleum Center.

Shortly after the discovery of oil in the valley in 1859, Oil Creek, despite its shallow water, floated thousands of barrels of crude oil to markets down-river. This was possible through the erection of dams which, when cut, would supply enough water to float 150 to 200 huge flatboats, some holding 5,000 barrels of oil per boat, down the creek at one time.

It is not expected that such boating activity or commerce will ever again spring up on Oil Creek, but with the Pennsylvania Department of Forests and Waters developing a 7,000 acre, Project 70 park in the valley the Pittsburgh society traveled, it is possible that large canoeing parties will now be seen quite frequently on Oil Creek.

AUDUBON MEMBERS
use canoe to enjoy six hour
trip down famous Oil



the trip last spring in front of some of the canoes they trailered



PLANNING CRUISE are Audubon members Dorthy Olson, Paul and Christine Wick, Arne Olson, and Beulah Fry, all of Pittsburgh. Below members of group take care to pass behind fishermen in mid-stream.

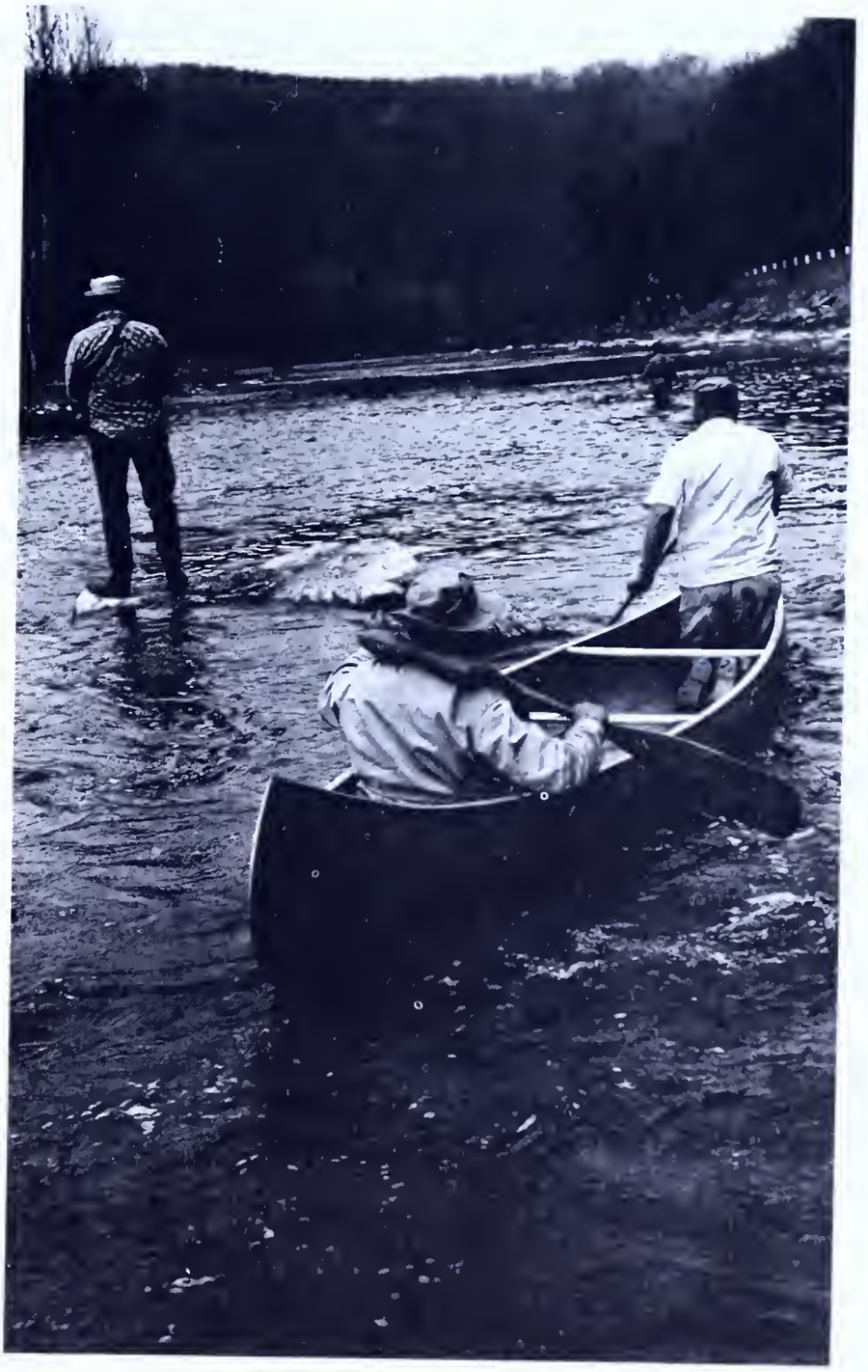


L CANOES float quietly down Oil Creek as Audubon mem- the scenic countryside.

by
STEVE SZALEWICZ



OVER, group comes ashore at bridge near Rynd Farm.





GOVERNOR RAYMOND P. Shafer who two years ago received a Citation himself for a shad he caught near Lackawaxen on the upper Delaware presents Junior Citations to three young fishermen who landed some big ones on a trip to the same area last spring. The boys are, left to right, C. J. Morrison, son of Woodstream Corporation's Dave Morrison; Marty Conmy, son of the Governor's former press secretary, Jack Conmy; and David Stampler, son of Governor's aide Sgt. Manley Stampler.



HUSKY MUSKY membership is p sented to Hummelstown angler Rob Light by PFC Special Patrolman Geo Conz.

1968 BIG FISH

Award Winners Listed

by TOM EGGLER, Editor, Pennsylvania Angler

BELOW—MARK CASTEL, 11, of Portage receives a Pennsylvania Angler Junior Fishing Citation from Cambria County Waterways Patrolman Tony Murawski.



EITHER MORE BIG FISH ARE BEING CAUGHT or more fishermen are talking about the ones they land, at least according to the number of Pennsylvania Angler Fishing Citations and Husky Musky Club memberships awarded during 1968.

Young fishermen made the biggest gain—some 287 Junior Citations were issued by this magazine for the year as compared with 81 in 1967. Senior Citations increased from 225 for the 1967 season to 257 in 1968. (Junior Citation Winners in June issue.)

And last—but certainly far from least—were the muskie fishermen who added 44 more regular memberships to the exclusive Husky Musky Club. This compares with 40 for 1967.

The number of Honorable Mention Awards for Muskellunge catches also jumped—from 24 to 36.

JUNIOR CITATION WINNERS WILL APPEAR IN JUNE ANGLER

1968 HUSKY MUSKY CLUB MEMBERSHIPS

ANGLER'S NAME & HOMETOWN	LENGTH & WEIGHT	WATER AREA & COUNTY
Joseph Dropesky, Mt. Carmel	43½ inches, 21⅛ pounds	Susquehanna River, Northumberland County
Charles A. Snyder, Jr., Hummelstown	40½ inches, 19⅛ pounds	Susquehanna River, Lancaster County
Willis Hulings, Clarendon	44 inches, 23 pound, 3 ounce	Allegheny River, Warren County
Paul Warner, Titusville	46 inches, 24 pounds	Conneaut Lake, Crawford County
Lauri J. Lundstrom, Ashtabula, Ohio	43¾ inches, 23⅛ pounds	Susquehanna River, Lancaster County
Tom Brest, Sharon	44 inches, 27¾ pounds	Pymatuning Lake, Mercer County
Gary V. Fitzgerald, Friedens	40¼ inches, 12⅞ pounds	Lake Somerset, Somerset County
Paul Kumpfmiller, Pittsburgh	42 inches, 26 pound, 3 ounce	Lake Erie, Erie County
Dale Hennon, New Castle	44 inches, 24½ pounds	Pymatuning Lake, Crawford County
Carl Allen, Sharpsville	43½ inches, 25½ pounds	Pymatuning Lake, Crawford County
W. M. McVicker, Stoystown	41¼ inches, 17½ pounds	Somerset Lake, Somerset County
Donald R. Geiss, Mansfield	42 inches, 18½ pounds	Hills Creek Lake, Tioga County
William J. Oshinsky, Erie	44 inches, 19½ pounds	Erie Bay, Erie County
Wayne Ogline, Stoystown	43 inches, 22 pounds	Shawnee Lake, Bedford County
Rodney Slade, Jr., New Castle	47 inches, 33½ pounds	Causeway, Pymatuning, Crawford County
Thomas E. Kimmel, Somerset	41 inches, 16 pound, 8 ounce	Somerset Lake, Somerset County
Richard J. Carson, Erie	47½ inches, 24 pound, 12 ounce	Erie Bay, Erie County
L. G. Taxacher, McKees Rocks	46¼ inches, 23 pound, 4 ounce	Conneaut Lake, Crawford County
Albert H. Bauer, Jr., Erie	43 inches, 25½ pounds	Erie Bay, Erie County
Barry J. Hildebrand, Conemaugh	42½ inches, 22 pounds	Shawnee Lake, Bedford County
Iver M. Stover, Harrisburg	40 inches, 16 pounds	Susquehanna River, Lancaster County
Albert H. Bauer, Jr., Erie	41 inches, 17 pounds	Presque Isle Bay, Erie County
Albert H. Bauer, Jr., Erie	44 inches, 22 pound, 10 ounce	Presque Isle Bay, Erie County
Marilin E. Snyder, Levittown	42½ inches, 23 pounds	Shawnee St. Park, Bedford County
Bruce Middlekauff, Camp Hill	40½ inches, 16 pound, 4 ounce	Susquehanna River, York County
Edward L. Crumlich, New Cumberland	44 inches, 20 pound, 4 ounce	Susquehanna River, York County
Edward L. Crumlich, New Cumberland	40¼ inches, 17 pound, 2 ounce	Susquehanna River, York County
Henry E. Peters, Saegertown	44½ inches, 21 pounds	Cussewago Creek, Crawford County
Ben Denly, Cleveland, Ohio	47½ inches, 33½ pounds	Pymatuning Lake, Crawford County
Robert E. Rearick, Jersey Shore	48 inches, 31 pound, 8 ounce	Hill Creek Lake, Tioga County
Robert W. Shaffer, Greenville	51 inches, 38¼ pounds	Pymatuning Res., Mercer County
George Ferko, Sharon	45 inches, 36½ pounds	Shenango River, Mercer County
Caroline Sharpvack, Classport	49½ inches, 32 pound	Sugar Lake, Crawford County
Floyd Ludwig, Latrobe	40 inches, 17 pounds	Allegheny River, Warren County
Alex Aversa, Union City	45¼ inches, 22½ pounds	Canadohta Lake, Crawford County
William G. Johns, Reynoldsville	40 inches, 18 pound, 4 ounce	Allegheny River, Armstrong County
Fred S. Schmucker, Rockwood	42½ inches, 26 pounds	Lake Somerset, Somerset County
George William Keller, Harrisburg	43 inches, 22½ pounds	Susquehanna River, Lancaster County
Robert W. White, Albion	52 inches, 37 pounds	Conneaut Lake, Crawford County
George Lewis Klinedinst, York	41 inches, 16 pound, 5 ounce	Susquehanna River, York County
John Pape, Punxsutawney	41¾ inches, 21¼ pound	Allegheny River, Forest County
James D. Williams, Hyndman	44 inches, 21 pounds	Shawnee Lake, Bedford County
Kenneth L. Fullom, Camp Hill	41 inches, 14 pounds	Opossum Lake, Cumberland County
Frank A. Hilderbrandt, Villanova	46 inches, 25 pounds	Schuylkill River, Montgomery County

HONORABLE MENTION—

Anthony C. Distler, St. Marys	36 inches, 15 pounds	Allegheny River, Forest County
Stephen J. Muich, Johnstown	36 inches, 11 pounds	Raystown Branch of Juniata River, Mifflin County
Richard L. Smith, Meadville	38 inches, 14 pound, 8 ounce	Conneaut Lake, Crawford County
Eugene Fitzgerald, Friedens	39 inches, 14 pounds	Lake Somerset, Somerset County
Ralph C. Fretts, Scottsdale	33¾ inches, 9 pound, 4 ounce	Lake Somerset, Somerset County
Dale Hennon, New Castle	38 inches, 13½ pounds	Pymatuning Lake, Crawford County
Lawrence R. Hausele, Loyalhanna	36½ inches, 9 pound, 7 ounce	Lake Somerset, Somerset County
Patrick Greenwood, Johnstown	33 inches, 8 pound, 6 ounce	Lake Somerset, Somerset County
Anthony Vitalie, Johnstown	32 inches, 9 pounds	Lake Somerset, Somerset County
Jeffrey Ferry, Somerset	31 inches, 7 pound, 8 ounce	High Point Lake, Somerset County
Lawrence W. Failon, Carlisle	35½ inches, 11 pounds	Susquehanna River, York County
Z. R. Leslie, Somerset	34 inches, 9 pounds	Lake Somerset, Somerset County
Maynard Bender, Berlin	33¼ inches, 8 pound, 4 ounce	Lake Somerset, Somerset County
Paul W. Sleighter, Camp Hill	38 inches, 14 pound, 4 ounce	Pinchot Park Lake, York County
Stephen P. Hartsky, Sharon	37½ inches, 13½ pounds	Shenango River, Mercer County
Jeffrey Ferry, Somerset	31 inches, 7½ pounds	Hi-Pont Lake, Somerset County
Valerie Goss, Huntingdon	36 inches, 11¾ pounds	Raystown Dam, Huntingdon County
Bonnie Alyce Angst, Lansford	38 inches, 11 pound, 5 ounce	Lake Jean, Luzerne County
Tim Drake, Pleasantville	30¾ inches, 6 pounds	Allegheny River, Forest County
Barry Corkle, Highspire	34 inches, 11 pounds	Hill Island Susquehanna Reser., Dauphin County
Victor P. Himes, Bethel Park	39¾ inches, 12½ pounds	Lake Somerset, Somerset County
James A. Yetter, Port Royal	35 inches, 12 pounds	Juniata River, Juniata County
Robert R. Corolus, Lewistown	33½ inches, 7 pound, 8 ounce	Juniata River, Mifflin County
Robert R. Corolus, Lewistown	33 inches, 8½ pounds	Juniata River, Mifflin County
John R. Keeler, Mechanicsburg	35 inches, 12 pounds	Susquehanna River, York County
Henry K. Grissinger, Etters	36½ inches, 13⅜ pounds	Susquehanna River, York County
Frank O. Cupper, Lewistown	30¼ inches	Juniata River, Mifflin County
John R. Keeler, Mechanicsburg	38¼ inches, 14 pound, 4 ounce	Susquehanna River, York County
Larry Hagan, Lewistown	32 inches, 8 pounds	Juniata River, Mifflin County
Roger Scarlett, Edinboro	31 inches, 7 pounds	Edinboro Lake, Erie County
Fritz Curtze, Erie	31 inches, 7 pounds	Edinboro Lake, Erie County
Victor Marcoz, Latrobe	37 inches, 12½ pounds	Lake Somerset, Somerset County
William J. Pollock, Central City	38½ inches, 13½ pounds	Lake Somerset, Somerset County
Harry P. Stein, Lewistown	32½ inches, 7 pound, 6 ounce	Juniata River, Mifflin County
Harry P. Stein, Lewistown	36¾ inches, 12 pounds	Juniata River, Mifflin County
Andy Petruska, Johnstown	34 inches, 11 pounds	Lake Somerset, Somerset County
Earl Huber, Jr., Rahns	39 inches, 15 pounds	Perkiomen Creek, Montgomery County
Michael J. Pleso, Sharon	38 inches, 13 pound, 8 ounce	Pymatuning Lake, Erie County
Mark Palko, Natrona Heights	39 inches	Allegheny River, Armstrong County
Len Dennis, Lancaster	38 inches, 15 pounds	Falmouth, Lancaster County
Curtis Fullom, Camp Hill	36½ inches, 12 pound, 4 ounce	Opossum Lake, Cumberland County











1968 PENNSYLVANIA ANGLER CITATION WINNERS

ANGLER'S NAME & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Robert R. Erdman, Elysburg	26½ in., 5 lb. chain pickerel on a minnow	Hunters Lake, Sullivan County
Delbert Hollister, Montrose	24 in., 6½ lb. largemouth bass on a shiner	Elk Lake, Susquehanna County
Gerald R. Petrucci, Uniontown	18 in., 2⅛ lb. brook trout on a nightcrawler	Virgin Run Lake, Fayette County
Frank Summers, Montrose	26 in., 5 lb., 1 oz. chain pickerel on a shiner	Quaker Lake, Susquehanna County
Robert A. Rasely, Stroudsburg	27¼ in., 5½ lb. chain pickerel on a minnow	Meisertown, Monroe County
George Sekura, Canonsburg	30½ in., 10½ lb. walleye on a jig	Allegheny River, Forest County
David H. Breese, Montrose	25¾ in., 3¾ lb. chain pickerel on a minnow	Reynold's Pond, Susquehanna County
Robert J. Gregor, Paupack	15 in., 1⅝ lb. yellow perch on a minnow	Lake Wallenpaupack, Pike County
Harold (Whitey) Berger, Reading	36 in., 9½ lb., northern pike on a jig	Ontelaunee Lake, Berks County
Beryl Raybuck, West Hickory	30½ in., 11½ lb. walleye on a jig	Allegheny River, Forest County
Joseph Smith, Eightyfour	30¼ in., 9 lb., 9 oz. walleye on a minnow	French Creek Crawford County
Albert Solosky, Bethlehem	14⅞ in., 1⅞ lb. yellow perch on a minnow	Lake Wallenpaupack, Pike County
Edward Orloski, Mountaintop	26½ in., 4 lb., 9 oz. chain pickerel on a spoon	Glen Summit, Luzerne County
John Pecil, Nanticoke	15¼ in., 1¾ lb. yellow perch on a sunfish	Wescolang Lake, Pike County
John Bat, Wilkes-Barre	23 in., 7½ lb. largemouth bass on a live bait	Harris Pond, Luzerne County
Rev. William F. Wunder, East Stroudsburg	16 in., 1¾ lb. yellow perch on a minnow	Whittaker Pond, Pike County
Edward R. Marriott, Dauphin	26½ in., 5 lb., 9 oz. chain pickerel on a bucktail jig	Stoney Creek, Dauphin County
Paul Warner, Titusville	46 in., 24 lb. muskellunge on a minnow	Conneaut Lake, Crawford County
Melvin R. Graham, Jr., Lawton	25 in., 4 lb. chain pickerel on a shiner	Lake Meadows, Susquehanna County
Melvin R. Graham, Jr., Lawton	23 in., 6⅓ lb. largemouth bass on a shiner	Little Elk, Susquehanna County
Teresa Ann Pollicino, Mapleton Depot	15½ in., 1½ lb. white crappie on a live minnow	Raystown Dam, Huntingdon County
Barry A. Leonard, Royalton	36 in., 26 lb. carp on a shrimp	Swatara Creek, Dauphin County
Craig Piurkoski, Ridgway	20½ in., 3 lb. brook trout on a nightcrawler	Big Mill Creek, Elk County
Jeffrey Wayne Kizer, Port Jervis, New York	29 in., 7 lb. chain pickerel on a live bait	Duck Harbor, Wayne County
Sterling Metzgar, Stockertown	20 in., 4 lb. smallmouth bass on a sonic	Delaware River, Northampton County
Richard Kyle, Huntingdon	11 in., 1 lb. rock bass on a hellgramite	Raystown Branch, Huntingdon County
Chester W. Williams, Plains	14½ in., 11 lb., 3 oz. yellow perch on a CP #3	Perrin's Marsh, Luzerne County
Ralph H. Myers, Huntingdon	11¼ in., 1 lb. rock bass on a hellgramite (rubber)	Raystown Branch, Huntingdon County
William Caffrey, Wilkes-Barre	32⅝ in., 12¾ lb. lake trout on a xmas tree & nightcrawler	Harveys Lake, Luzerne County
William Anderson, Central City	29½ in., 13 lb., 6 oz. brown trout on a mepps spinner	Letter Kenny Dam, Franklin County
Scott Pearson, Edinboro	15½ in., 2½ lb. black crappie on a nightcrawler	Edinboro Lake, Erie County
Philip R. Brown, Harrisburg	11¼ in., 1 lb. 2 oz. bluegill on a salmon egg	Swatara Creek, Dauphin County
Scott David Keeler, Mechanicsburg	11 in., 1 lb. rock bass on a nightcrawler	Susquehanna River, York County
Douglas Carl Nichols, Lewistown	11⅛ in., 1 lb. rock bass on a black streamer	Lost Creek, Juniata County
Robert J. Smith, Lancaster	21 in., 4 lb., 10 oz. smallmouth bass on a surface lure	Lower Susquehanna River, Lancaster County
Ronald Richard Tyson, Palmyra	16¼ in., 3¼ lb. bullhead on a nightcrawler	Union Deposit, Dauphin County
Stephen Costelnick, Jessup	14¾ in. yellow perch on a nightcrawler	Lower Woods, Wayne County
David J. Biehl, Hamburg	15 in., 1½ lb. yellow perch on a minnow	Promised Land Lake, Pike County
Frank J. Barker, Havertown	11⅛ in., ¾ lb. rock bass on a worm	Valley Creek, Chester County
Vincent Schields, Shohola	15½ in., 2 lb., 1 oz. yellow perch on a minnow	Twin Lakes, Pike County
Vincent Schields, Shohola	27 in., 5 lb., 6 oz. chain pickerel	Walker Lake, Pike County
Nevin Griffith, Littlestown	20¼ in., 3¾ lb. smallmouth bass on a minnow	McCalls Ferry, York County
Larry Burnett, Erie	11¾ in., 1 lb., 5 oz. rock bass on a panther-martin	Fairview Gravel Pit, Erie County
Joseph H. Carter, Jr., Avella	15 in., 2 lb., 5 oz. black crappie on a Weber arco-black-white #12	Langeloth Reservoir, Washington County
William F. Brinton, Honey Brook	17¼ in., 2 lb., 6 oz. brook trout on a jointed minnow	Brandywine Creek, Chester County
John Roy Wise, II, Lebanon	29⅛ in., 11¼ lb. brown trout on cheese	Lions Creek, Lebanon County
Jerry Stanton, Easton	27½ in., 7 lb., 4 oz. chain pickerel on a live bait	Delaware River, Northampton County
Hilda M. Henry, Royalton	21 in., 4 lb., 5 oz. blue catfish on a nightcrawler	Swatara Creek, Dauphin County
Robert MacDowell, Johnstown	18¼ in., 2½ lb. fallfish on cheese	Stevenson Dam, Potter County
Robert MacDowell, Johnstown	18¾ in., 2¾ lb. fallfish on cheese	Stevenson Dam, Potter County
Denise Davis, Greenville	15¾ in., 2 lb., 1 oz. bullhead on a minnow	Pymatuning Lake, Crawford County
Thomas R. Hensel, Shoemakersville	27 in., 4¼ lb. chain pickerel on a shiner	Hopewell Lake, Berks County
Patrick Spegar, Peckville	15¼ in., 2 lb. bullhead on a nightcrawler	Chapman Lake, Lackawanna County
Margaret L. Neiderer, Hanover	11½ in., 1¾ lb. bluegill on a nightcrawler	Farm Pond, York County
Richard Yeager, Sunbury	11½ in., 13 oz. rock bass on a worm	Susquehanna River, Northumberland County
Louis Domiano, Scranton	25 in., 6½ lb. bullhead on a nightcrawler	Lake Henry, Lackawanna County
Dennis Hill, Johnstown	15½ in., 2 lb. bullhead on a worm	Brown's Pond, Cambria County
Bob Copfer, Erie	14⅛ in., 1 lb., 8½ oz. yellow perch on a minnow	Baer Farm Beach, Erie County
Gerald I. Kime, Cherry Tree	21 in., 3¼ lb. brook trout on a spinner	Cush Creek, Indiana County
Patrick J. Mills, South Fork	14 in., 1 lb., 8 oz. yellow perch on a worm	Shawnee Dam, Bedford County
Harold O. Crouse, Hanover	15 in., 1¾ lb. white crappie on a spinner	Spring Grove, York County
Peter R. Chapla, Old Forge	14 in., 1 lb., 4 oz. yellow perch on a minnow	Lake Winola, Wyoming County
Ronald Itinger, Alexandria	16 in., 2 lb. bullhead on a soft shell crab	Raystown Dam, Huntingdon County
Pauline R. Leach, Mrs., Clarks Summit	16 in., 2 lb., 2 oz. yellow perch on a minnow	Walker Lake, Pike County
Terry Barrass, Belle Vernon	15¾ in., 1¾ lb. bullhead on a dardevle	Raystown Dam, Huntingdon County
Floyd Fife, Jr., Archbald	16 in., 2 lb. bullhead on a worm	Lake Ariel, Wayne County
John L. Cutugno, Quarryville	23¼ in., 7¾ lb. largemouth bass on a jitterbug	Susquehanna River, Lancaster County
Bruce Middlekauff, Camp Hill	21 in., 4¾ lb. smallmouth bass on a gold rapala	Holtwood Dam Tailrace, Lancaster County
Gene A. Hitz, Lebanon	28¼ in., 9 lb. brown trout on a dardevle	Lions Lake, Lebanon County
Rodney Slade, Jr., New Castle	47 in., 33½ lb. muskellunge on a minnow	Causeway, Pymatuning Lake, Crawford County
Thomas R. Pheiffer, Easton	18 in., 3 lb. bullhead on a minnow	Delaware River, Northampton County
Clair Cubitt, Erie	37⅜ in., 11 lb. northern pike on a flatfish	Erie Bay, Erie County
Dorothy Swartzfager, Mrs., Shippenville	15½ in., 1 lb., 15 oz. bullhead on a worm	Tionesta Reservoir, Forest County
Andrew S. Yablonsky, McMurray	27 in., 9 lb. rainbow trout on salmon eggs	Dutch Fork Lake, Washington County
Charles J. Gerancher, N. Catasauqua	19 in., 3 lb. brook trout on a swiss swing	Little Lehigh, Lehigh County
Steven John Prestas, Ashley	16 in., 2¼ lb. crappie on a swiss swing	Laurel Lake, Luzerne County
Robert G. Hill, Emmaus	14½ in., 1 lb., 4 oz. yellow perch on a spinner	Walker Lake, Pike County
Joe Orsich, Sykesville	39 in., 15 lb. northern pike on a creek chub pike plug	Reed's Dam, Jefferson County
John Palermo, Sharon	16 in., 1½ lb. crappie on a minnow	Pymatuning Dam, Crawford County
Eugene R. Snyder, Dallastown	20½ in., 3 lb., 13 oz. smallmouth bass on a bucktail jig	Susquehanna River, York County
James L. Meador, Butler	17 in., 2 lb., 5 oz. black crappie on a minnow	Oneida Dam, Butler County

Warren C. Beckwith, Lookout	on a shiner	County	Templeton	bass on a soft shelled crab	County
Robert Youtz, Hummelstown	28 in., 10¾ lb. brown trout on a flatfish	Duck Harbor Pond, Wayne County	Alva J. Coffman, Sr., Uniontown	20½ in., 4¼ lb. smallmouth bass on a creek chub	Youghiegheny Reservoir, Fayette County
Ronald E. Schaffer, Pennsburg	25½ in., 5½ lb. bullhead (white catfish) on a minnow	Red Hill Dam, Dauphin County	Bruce T. Smith, Sunbury	21 in., 3 lb., 9 oz. smallmouth bass on a rapala	Susquehanna River, Northumberland County
Paul Bauer, Millvale	21¼ in., 5½ lb. smallmouth bass on a daredevil	Philadelphia Water Company Dam, Montgomery County	Richard Warke, Ashley	25¼ in., 2½ lb. chain pickerel on a swiss swing	Laurel Lake, Luzerne County
Ernest H. Tyson, Boyertown	20¾ in., 4⅛ lb. smallmouth bass on a plastic nightcrawler	Allegheny River, Forest County	Harry R. Egolf, Landisburg	23 in., 5¼ lb. largemouth bass on a garcia spinner	Shermans Creek, Perry County
Mary Mursch, Mrs., E. Stroudsburg	15 15/16 in. white crappie on a minnow	Borough Dam, Berks County	Thomas Raskiewicz, Kingston	23¼ in., 7 lb., 8 oz. largemouth bass on a jitterbug	Lake Carey, Wyoming County
Chester S. Bryant, Cumberland, Md.	14½ in., 1¼ lb. yellow perch on a 5 in. shiner	Duck Harbor Pond, Wayne County	Ray H. Boyer, Sunbury	16½ in., 2 lb., 10 oz. bullhead on a rubber worm	Susquehanna River, Northumberland County
Donald Houseknecht, Jr., Luzerne	23 in., 6 lb., 14 oz. largemouth bass on a minnow	Lake Koon, Bedford County	Joe Morek, Jr., Old Forge	32¼ in., 9 lb., 11 oz. walleye on a stone catfish	Susquehanna River, Wyoming County
Frank Horvath, Lansford	23 in., 7 lb., 6 oz. largemouth bass on a rapala	Collyers Lake, Susquehanna County	Henry Winwood, Jr., Butler	19 in., 1¾ lb. fallfish on a hard shell crab	Sinnemahoning Creek, Potter County
Daniel A. Coover, Shippensburg	17 in., 2 lb., 2 oz. brook trout on a nightcrawler	Little Bear Creek, Carbon County	Steven Curtze, Erie	24 in., 5½ lb. largemouth bass on a golden rapala	Presque Isle Bay, Erie County
Francis Masiewicz, Scranton	23 in., 5 lb., 5 oz. rainbow trout on a worm	Middle Spring Creek, Cumberland County	Stephen Bruce Dixon, Levittown	17½ in., 3 lb. brook trout on a minnow	Shohola Creek, Wayne County
David Hanisek, Lake City	15 in., 2½ lb. bullhead on a nightcrawler	Panther Lake, Wayne County	John W. Carney, Hawley	15½ in., 1 lb., 9 oz. black crappie on a bass bug	Lake Wallenpaupack, Wayne County
Richard J. Carson, Erie	27¾ in., 7 lb. 12 oz. rainbow trout on a nightcrawler	Elk Creek, Erie County	C. E. Diffenderfer, Highspire	36½ in., 23 lb. carp on a worm	Susquehanna River, Dauphin County
L. G. Taxacher, McKees Rocks	47½ in., 24 lb., 12 oz. muskellunge	Erie Bay, Erie County	Joseph Naleppa, Edinboro	17 in., 2 lb., 6 oz. crappie on a minnow	Edinboro Lake, Erie County
Robert MacDowell, Johnstown	46¼ in., 23 lb., 4 oz. muskellunge on a minnow	Conneaut Lake, Crawford County	Harvey W. Scholl, Dr., East Greenville	22 in., 4 lb., 10¼ oz. smallmouth bass on a bomber	Green Lane Reservoir, Montgomery County
Marilyn L. Andrew, Allentown	15 in., 1 lb. yellow perch on a nightcrawler	Lake Somerset, Somerset County	Frank Palmer, Montrose	11 in., 1 lb., 3 oz. bluegill on a nightcrawler	Little Elk Lake, Susquehanna County
Mark M. Ford, Coatesville	14¼ in., 1 lb. yellow perch on a worm	Lake Wallenpaupack, Pike County	Rev. William F. Wunder, E. Stroudsburg	23¼ in., 6 lb., 12 oz. largemouth bass on a rubber worm	Delaware River, Monroe County
Bill R. Long, Northumberland	15¼ in., 2¼ lb. white crappie on a river runt plug	Coatesville Reservoir, Chester County	John P. Jones, Jr., Scranton	23¾ in., 6½ lb. largemouth bass on a plug	Sicklers Pond, Wyoming County
Grant Long, Northumberland	20½ in., 3 lb., 7 oz. smallmouth bass on a rebel	Susquehanna River, Northumberland County	James Martin, Dallas	16 in., 2 lb., 3 oz. bullhead catfish on a red worm	Cooks Pond, Wyoming County
Frank Antenori, Peckville	20 in., 3 lb., 5 oz. smallmouth bass on a minnow	Susquehanna River, Northumberland County	Ben Denly, Cleveland, Ohio	47½ in., 33½ lb. muskellunge on a swimmer spoon	Pymatuning Lake, Crawford County
Helen Clark, Portland	14½ in., 1 lb., 7½ oz. yellow perch on a nightcrawler	Millers Pond, Wayne County	Robert E. Rearick, Jersey Shore	48 in., 31 lb., 8 oz. muskellunge on a creek chub	Hill Creek Lake. Tioga County
Roy George, Wind Gap	17¼ in., 3½ lb. brook trout on a worm	Marshals Creek, Monroe County	Robert W. Shaffer, Greenville	51 in., 38¼ lb. muskellunge on a nightcrawler	Pymatuning Reservoir, Mercer County
Dwain Eugene Seese, Homes City	15 in., 2 lb., 2 oz. rock bass on a minnow	Saylor's Lake, Monroe County	William McDaid, Tionesta	18¼ in., 2¾ lb. brook trout on a nightcrawler	Mouth Hickory Creek, Forest County
Dorathea W. Herman, Mrs., Jim Thorpe	17¾ in., 1 lb., 11 oz. brook trout on a nightcrawler	Moore's Run, Potter County	Basil Casselberry, Montrose	23 in., 7 lb., 6 oz. largemouth bass on a pflueger zam	Tuscarora Pond, Susquehanna County
John I. Taylor, West Chester	18 in., 2 lb., 2 oz. brook trout on a worm	Bear Creek Lakes, Carbon County	Sidney Kleeman, Broomall	15¾ in., 1¾ lb. crappie on a strip of blue gill	Springton Reservoir, Delaware County
James Rugg, Confluence	20 in., 4 lb. smallmouth bass on a helgramite	Delaware River, Pike County	Jay Gensemer, Reading	15 in. crappie on a plastic minnow	Ontelaunee Dam, Berks County
Don Shartzer, Farmington	37 in., 11 lb., 14 oz. northern pike on a shiner	Tub Run, Fayette County	Robert E. Ludwig, Selinsgrove	20 in., 3 lb., 2 oz. smallmouth bass on an ABU reflex	Susquehanna River, Northumberland County
Mark Zawada, Glenmoore	40 in., 14 lb. northern pike on a sucker	Yough Reservoir, Somerset County	Emory J. Kish, Thompson	25¾ in., 3 lb., 14 oz. chain pickerel on a rebel	Little Hickory, Wayne County
Ronald J. Bordner, Reading	12¾ in., 2 lb., 3 oz. bluegill on a worm	Valhalla Pond, Chester County	Anita Moyer, Bedford	15 in., 1¾ lb. bullhead on a nightcrawler	Raystown Dam, Huntingdon County
George Housholder, Pittsburgh	20¼ in., 4 lb., 2 oz. smallmouth bass on a weaver lure	Ontelaunee Lake, Berks County	Dave Davis, Alden	21 in., 4 lb., 2 oz. bullhead on a creek chub	North Lake, Luzerne County
Frank J. DeMarchi, Allentown	16 in., 2¼ lb. crappie on a minnow	Edinboro Lake, Erie County	Gerald Anastasia, New Castle	20 in., 3 lb., 6½ oz. smallmouth bass on a creek chub	Conneaut Lake, Crawford County
Kurt Schenkemeyer, Johnstown	21 in., 4 lb. smallmouth bass on a worm	Delaware River, Northampton County	Lawrence Baker, Mt. Braddock	23½ in., 6¾ lb. largemouth bass on a hula hoople	Crayberry Lake, Somerset County
Kris Miller, Polk	15½ in., 1½ lb. bullhead on a worm	Raystown Dam, Huntingdon County	Anthony M. DeCusatis, Haxleton	23¾ in., 6 lb., 8 oz. largemouth bass on a bossen heddon	Pocono Summit, Monroe County
James W. Hoy, Millersburg	28 in., 9 lb., 12 oz. brown trout on a streamer	Little Sandy Creek, Venango County	Albert H. Deitz, Mt. Carmel	31¾ in., 16 lb., 7 oz. blue catfish on a crayfish	Susquehanna River N.B., Northumberland County
Frances V. Brown, Alexandria	21 in., 5 lb. smallmouth bass on a rebel	Susquehanna River, Dauphin County	Eleanor B. Kizer. Towanda	30 in., 7½ lb. walleye on a sail shark	Susquehanna River, Bradford County
Paul Sovak, Aliquippa	15 in., 2 lb. bullhead on a minnow	Raystown Dam, Huntingdon County	Sol Klinger, Sunbury	21⅜ in., 4 lb., 2 oz. smallmouth bass on a rebel	Susquehanna River, Northumberland County
John J. Keller, Allentown	15¼ in., 2 lb. crappie on a minnow	Lakewood Pond, Beaver County	Danny Kerstetter, Shamokin Dam	11¼ in., 15 oz. rock bass on a worm	Susquehanna River, Northumberland County
Robert L. Kline, East Greenville	11 in., 1¾ lb. bluegill on a helgramite	Lake Wallenpaupack, Pike County	Daniel Goncar, Pittsburgh	32½ in., 16 lb., 4 oz. catfish on a chub	Allegheny River, Venango County
Francis J. Barker, Havertown	22 in., 5 lb., 4 oz. smallmouth bass on a jitterbug	West Branch Creek, Montgomery County	George Ferko, Sharon	45 in., 36½ lb. muskellunge	Shenango River, Mercer County
Anthony C. Greco, Philadelphia	16 in., 2 lb., 8 oz. bullhead on a minnow	Schuykill, Montgomery County	James E. Englert, Forksville	23½ in., 6½ lb. largemouth bass on a jitterbug	Camp Brule, Sullivan County
Earl D. Naugle, Selinsgrove	30 in., 9 lb. walleye on a june bug spinner	Van Sciver Lake, Bucks County	Thomas Bonacci, Carbondale	26 in., 5 lb. chain pickerel on live bait	Keen's Pond, Lackawanna County
Toby Masenheimer, York	27 in., 7¼ lb. bullhead on a minnow	Susquehanna River, Northumberland County	William Veronesi, Wayne	16 in., 1½ lb. black crappie on a c.p. swing	Lake Mokoma, Sullivan County
Robert T. Sublinsky, Lower Burrell	23 in., 6 lb., 8 oz. smallmouth bass on a nightcrawler	Impounding Dam, York County	Joseph R. Kuba, Bradenville	15¼ in., yellow perch on a rubber worm	Twin Lakes. Westmoreland County
John Veneziale, Lansdale	21½ in., 4 lb., 2 oz. smallmouth bass on a minnow	Allegheny River, Armstrong County	Joseph R. Kuba, Bradenville	23½ in., 8½ lb. largemouth bass on a rubber worm	Twin Lakes. Westmoreland County
	21 in., 4½ lb. smallmouth bass on a cedar plug	Perkiomen Creek, Montgomery County	Frank Chmielewski, Dupont	23 in., 7 lb., 6 oz. largemouth bass on a jitterbug	Johnsons Pond, Lackawanna County

ANGLER'S NAME & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
James B. Campbell, Newport	20½ in., 3¼ lb. smallmouth bass on a reuel lure	Susquehanna River, Perry County
Wilbur A. Young, Kinzer	22½ in., 6 lb., 4 oz. smallmouth bass on a golden shiner	Octorara Reservoir, Chester County
Walter G. Bowditch, Jr., Newtown	15½ in., 1 lb., 15 oz. black crappie on a helter's minnow	Little Mud Pond, Pike County
Robert F. Shunk, Huntingdon	16½ in., 2 lb. bullhead on a live minnow	Raystown Dam, Huntingdon County
Floyd E. Berkemeyer, Reading	39½ in., 14½ lb. northern pike on a minnow	Ontelaunee Lake, Berks County
Joseph Fogmeg, Scranton	24½ in., 7 lb. largemouth bass on a jitteroug & nightcrawler	Lake Winola, Wyoming County
Jake Anderskovich, Monesson	40 in., 15½ lb. northern pike on a golden shiner	Yough Dam, Fayette County
Marie Urey, Conneaut Lake	36 in., northern pike on a minnow	Conneaut Lake, Crawford County
David J. Knowles, Sr., Osceola Mills	16 in., yellow perch on a minnow	Black Moshannon Dam, Centre County
Andy Duley, Honesdale	23¼ in., 6½ lb. largemouth bass on a live bait	Bunnells Pond, Wayne County
Charles Yeager, Sunbury	20⅛ in., 3 lb., 2 oz. smallmouth bass on a minnow	Susquehanna River, Northumberland County
Clem J. DaDurka, Shamokin	21¾ in., 4¾ lb. smallmouth bass on a minnow	Susquehanna River, Northumberland County
Lawrence C. Pfister, Erie	14⅜ in., 1 lb., 15 oz. yellow perch on a minnow	Lake Erie, Erie County
Caroline Sharpvack, Classport	49½ in., 32 lb. muskellunge on a plug	Sugar Lake, Crawford County
Robert L. Kautz, Hummelstown	17 in., 2 lb. brook trout on a nymph	Yellow Breeches, Cumberland County
John E. Radebach, Osceola Mills	14⅜ in., ¾ lb. yellow perch on a minnow	Black Moshannon Dam, Centre County
Donald E. Patterson, Lilly	38 in., 14 lb. 14 oz. northern pike on a sputterbug	Glendale Lake, Cambria County
Frances W. Olmsted, Arlington, Virginia	15⅜ in. bullhead on a nightcrawler	Big Pond, Bradford County
Thomas D. Diskevich, Jr., Penn Hills	25 in., 6½ lb. bullhead catfish on a minnow	Allegheny River, Armstrong County
Thomas D. Diskevigh, Jr., Penn Hills	16 in., 1 lb. bullhead catfish on a minnow	Allegheny River, Armstrong County
Edward Ziets, Philadelphia	23 in., 5½ lb. largemouth bass on dough bait	Springton Reservoir, Delaware County
Charles Hower, Mt. Bethel	32½ in., 12½ lb. walleye on a rapala	Delaware River, Northampton County
Walter D. Spangler, Mohrsville	16 in., 1 lb., 9 oz. black crappie on a minnow	Ontelaunee Lake, Berks County
Charles Chabal, III, Tarentum	36 in., 24 lb. channel catfish on a sucker	Allegheny River, Armstrong County
Dr. Donald G. Hunter, Erie	37 in., 12 lb. 14 oz. northern pike on a minnow	Presque Isle Bay, Erie County
George Stahl, Sunbury	20⅛ in., 3 lb., 2 oz. smallmouth bass on a rapala	Susquehanna River, Northumberland County
Henry Mitterling, Sunbury	22¾ in., 5 lb., 6 oz. smallmouth bass on a minnow	Susquehanna River, Northumberland County
Robert Frank Solomon, New Kensington	20½ in., 4 lb., 11 oz. smallmouth bass on a sand pike	Allegheny River, Armstrong County
Raymond M. Newman, New Castle	11½ in., 1 lb. rock bass on a soft shelled crayfish	Elk Creek, Erie County
Robert H. Frick, Fleetwood	37½ in., 11½ lb. northern pike on a silver minnow	Lake Ontelaunee, Berks County
Garnet L. Duley, Honesdale	23¾ in., 6¾ lb. largemouth bass on a live bait	Bunnells Pond, Wayne County
Ralph Sekeres, Connellsville	20½ in., 4½ lb. smallmouth bass on a worm	Yough Dam, Somerset County
Francis J. Soyke, York	38 in., 13 lb., 2 oz. northern pike on a mepps spinner	Pinchot Lake, York County
Warren C. Beckwith, Lookout	31½ in., 10 lb. walleye on a flatfish	Duck Harbor Pond, Wayne County
Alex Aversa, Union City	45¼ in., 22½ lb. muskellunge on a creek chub	Canadohta Lake, Crawford County
Paul L. Weigle, Manchester	36 in., 8 lb. 12 oz. northern pike on a c. p. swing	Conewago Creek, York County
Jimmy Brandt, Mechanicsburg	20½ in., 3½ lb. bullhead catfish on a worm	Pond, Cumberland County
Willard Abraham, Uniontown	40¼ in., 16¾ lb. northern pike on a beno plug	Yough Dam, Fayette County
Clyde G. Boyer, Milton	21¼ in., 4 lb., 9 oz. smallmouth bass on a rapala	Susquehanna River, Northumberland County
Walter L. Eckert, Laureldale	39 in., 15 lb. northern pike on a minnow	Ontelaunee Lake, Berks County
William H. Trutt, New Cumberland	30 in., 15 lb. channel catfish on a crayfish	Susquehanna River, Perry County
Kenneth Hilbert, Allentown	16 in., 2 lb., 4 oz. bullhead on a nightcrawler	Jordan Creek, Lehigh County
David St. Clair, Bethlehem	24¼ in., 8 lb., 14 oz. largemouth bass on a rubber worm	Mink Pond, Pike County

ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
William H. Trutt, New Cumberland	20 in., 3½ lb. smallmouth bass on a rapala	Susquehanna River, Perry County
John R. Wolfe, Jr., Lehighton	23½ in., 7¾ lb. largemouth bass on a rubber worm	Brady's Lake, Monroe County
Mrs. Joseph E. O'Bryan, Philadelphia	36 in., 24½ lb. carp on a worm	Delaware River, Bucks County
James L. Martin, Jr., Wrightsville	18½ in., 2 lb., 3 oz. fallfish on a nightcrawler	Loyalsock Creek, Sullivan County
Chester J. Sipe, Royalton	21 in., 5 lb. smallmouth bass on a midgeoreno	Susquehanna River, Dauphin County
James Lauer, Waymart	25¼ in., 4 lb. 3 oz. chain pickerel on a shiner-minnow	Lake Ladore, Wayne County
Paul Cooper, Fayette City	31 in., 10 lb. walleye on a plastic nightcrawler	Allegheny River, Warren County
Clarence Blumberg, Carlisle	20 in., 5 lb. 4 oz. smallmouth bass on a minnow	Susquehanna River, Perry County
Gary Philip Quirin, Altoona	11¼ in., 15 oz. rock bass on a shiner	Raystown Branch, Huntingdon County
J. Gary McDivitt, Camp Hill	11½ in., ½ lb. rock bass on a nightcrawler	Conodoquinet Creek, Cumberland County
Duane Dubernas, Folsom	15 in., 2 lb. bullhead on a worm	Springfield Reservoir, Delaware County
John D Weller, Birdsboro	14½ in., 1 lb., 1½ oz. yellow perch on a minnow	Bear Wallow Pond, Sullivan County
George F. Schumacher, Marysville	21¼ in., 5 lb. smallmouth bass on a rapala	Susquehanna River, Perry County
Kenneth R. Clay, Drexel Hill	24 in., 8 lb. largemouth bass on a plastic worm	Octorora Creek, Lancaster County
Joseph R. Sabot, New Kensington	20 in., 4½ lb. smallmouth bass on a frog	Tionesta Dam, Forest County
Joseph R. Sabot, New Kensington	20 in., 4¾ lb. smallmouth bass on a frog	Tionesta Dam, Forest County
Joseph R. Sabot, New Kensington	20 in., 4¾ lb. smallmouth bass on a chub	Tionesta Dam, Forest County
Robert G. Bogdon, New Castle	20⅛ in., 4 lb., 2 oz. smallmouth bass on a jitterbug	Tionesta Dam, Forest County
Stephen F. Dusza, Vintondale	20¼ in., 4½ lb. smallmouth bass on a crab	Allegheny River, Forest County
Paul Cooper, Fayette City	31 in., 10 lb., 2 oz. walleye on a rubber crawler	Allegheny River, Warren County
Robert W. Divido, Nanty-Glo	31¼ in., 10½ lb. walleye on a chub	Allegheny River, Forest County
Emory Blum, Oil City	20 in., 4¼ lb. smallmouth bass on a jig	Allegheny River, Forest County
LeRoy H. Fishel, Butler	21⅞ in., 5 lb., 10 oz. smallmouth bass on a flatfish	Tionesta Dam, Forest County
Denton Carlson, Coulters	21¼ in., 4 lb. 10 oz. smallmouth bass on a spinner-mepps	Allegheny River, Allegheny County
Steve Borowski, New Castle	21½ in., 4¾ lb. smallmouth bass on a jitterbug	Allegheny River, Venango County
Richard Williams, Hartstown	21½ in., 5 lb. 12 oz. smallmouth bass on a flatfish	Conneaut Lake, Crawford County
Harold Bracht, York Haven	30 in., 8½ lb. walleye on a buck tail	York Haven Dam, York County
Leonard T. Spyhalsky, Honesdale	23½ in., 7½ lb. largemouth bass on a live bait	Bunnells Pond, Wayne County
Leonard T. Spyhalsky, Honesdale	23 in., 6½ lb. largemouth bass on a live bait	Bunnells Pond, Wayne County
Peter Sabot, Jr., New Kensington	20¼ in., 4¾ lb. smallmouth bass on a frog	Tionesta Dam, Forest County
Robert W. White, Albion	22½ in., 5 lb., 9 oz. smallmouth bass on a 10 in. stone roller	Conneaut Lake, Crawford County
Robert W. White, Albion	52 in., 37 lb. muskellunge on a 12 in. sucker	Conneaut Lake, Crawford County
Iver M. Stover (Smoky), Harrisburg	20¼ in., 3 lb. 2 oz. smallmouth bass on a jitterbug	Susquehanna River, Dauphin County
Steven Tate, York	22 in., 3 lb. bullhead on a red daredevil & sunny	Muddy Creek, York County
Eli T. Megines, Dallas	31 in., 10¼ lb. walleye on a minnow	Harvey's Lake, Luzerne County
Bruce Middlehauff, Camp Hill	20¼ in., 4¼ lb. smallmouth bass on a rapala	Susquehannna River, Cumberland County
Paul (Boots) Carroll, Conowingo, Maryland	20 in., 3¾ lb. smallmouth bass on a rebel	West Br. Octoraro, Lancaster County
Paul Hudec, Pittsburgh	30 in., 10 lb. walleye on a live chub	Allegheny River, Forest County
Dr. Edwin Bergstresser, Sunbury	21 in., 4 lb., 1 oz. smallmouth bass on an ABU	Susquehanna River, Northumberland County
Robert E. Ludwig, Selinsgrove	20½ in., 3 lb., 5 oz. smallmouth bass on a chub	Susquehanna River, Northumberland County
Larry L. Wallace, Hanover	18½ in., 3 lb. brook trout on cheese	Hanover Water Dam, York County
Leslie C. Hall, III, Wormleysburg	20¼ in., 3 lb., 1 oz. brook trout on a rubber worm	Marquette Lake, Lebanon County
Frank A. Hildebrandt, Villanova	46 in., 25 lb. muskellunge on a rebel	Schuylkill River, Montgomery County



AIRBOAT is ideal for easy traveling in shallow, weedy areas.

Carping at Conneaut

by
ELDY JOHNSTON

PAUL BARTELS, JIM SABIN AND BOB DOWNEY of Dravosburg and myself, arrived at Conneaut Marsh about daylight in our late spring quest for carp with archery tackle. The dark and murky waters were grim and foreboding, showing nary a sign of life as we shivered in the cool and fog-shrouded early dawn. "Perhaps we were misinformed?" I asked Jim. "No, this fellow stopped at my garage two days ago and said the carp were really acting up in here and no one was after them yet."

Still, it was with some misgivings that we started out. Paul and Jim would take the boat equipped with the air motor while Bob and I would stalk around the edges, though we did have another boat equipped with a conventional outboard. Jim was not concerned about the adaptability of his airboat, as he knew that it would go anywhere that had the slightest amount of water.

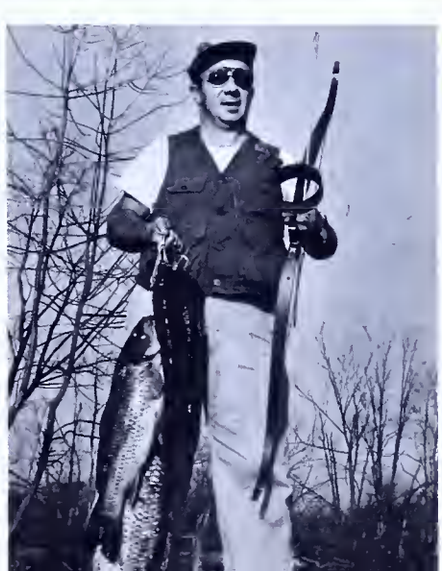
We watched as they breezed through the lily pads and headed up the narrow channel to disappear in the fog shrouded swamp. Bob and I started to work our way along the treacherous underbrush and as the sun came out the swamp came to life. We quickly decided to take the other boat and limit our travel to the narrow channels which looked more passable in the daylight. And besides we could hear the carp "working."

The larger carp were elusive targets and it was difficult to launch an effective arrow at them. The movement of your bow arm was all it took to generate instant flight and another miss. But finally we got the range and where to "aim" to get results. With the carp broadside, at a 20 foot range or less, we would aim about a foot inside them, and we started making hits, even in two to three foot of water. After scoring a hit, we would lay down our bow and bring the catch in by retrieving hand over hand.

By early afternoon we'd landed all the carp we could handle and decided to hang it up for another good trip.

BOB DOWNEY lines up on a carp (left) while author Eldy Johnston holds some big ones he brought down (center) and Paul Bartels stands ready as Jim Sabin guides a light airboat through the swamps (right).







MODERN CAMPING by DEL & LOIS KERR

Spectacular May

MAY, THE PEAK MONTH of the native wildflower season, certainly must be among the top contenders for most beautiful month of the year in Pennsylvania. Only the fall months with their spectacular foliage could rival it.

An ideal place to view an abundance of spring-blooming plants is Raccoon Creek Wildflower Reserve, maintained by the Western Pennsylvania Conservancy in Beaver County. The 300-acre tract abounds with over 500 varieties of flora native to Penn's Woods.

A large oak tree on the Jennings Trail dates back before the arrival of the white man in the Beaver Creek Valley. Some of the smaller plants, such as the horsetail date back much, much further to the days when coal, for which this part of the Commonwealth is so well known, was just beginning to form.

The reserve is free to the public and is open from 10 A.M. to 5 P.M. every day except Monday. If your camping club would like to tour the area as a group, with a trained botanist to guide you and identify the plants, you can make reservations by calling or writing the Western Pennsylvania Conservancy, 204 Fifth Avenue, Pittsburgh, Pa. 15222.

If you make the tour without a guide, we recommend you carry along a wildflower guide or handbook. We'd suggest the small paperback edition of "Flowers—A Guide to Familiar American Wildflowers," priced at just $1 from Colden Press, or "How to Know The Wild Flowers," by Mrs. William Dana, published by Dover Books, New York. It is also in paperback for $2.25.

Campsites, of course, are available at Raccoon Creek State Park adjacent to the Wildflower Reserve. The park is located in the Traverse Creek Valley in Beaver County and can be reached either by U.S. Route 30 or Route 18.

Built in 1938, the park was first under the supervision of the National Park Service and was turned over to the Commonwealth in 1946. A 102-acre lake offers trout, bass, walleye and pan fish, as well as a fine 873-foot swimming beach.

The camping area contains approximately 140 sites, some wooded, some open. The campground is located about one-fourth mile away from the lake. Sanitary facilities include showerhouse and flush toilets.

This park is often crowded in the summer but in spring you should be able to easily find a site. Grocery supplies, ice and gas can be purchased within one and one-half to three miles. During the swimming season, a refreshment stand is open in the main picnic area. Life guards are on duty from Memorial Day to Labor Day.

Frankfort Springs within the park produces seven kinds of mineral water and at one time a famous health resort stood on the site. Hiking trails follow the streams and ridges. Elevation in the park ranges from 850 feet to 1,300 feet.

Thanks to the extreme generosity and conservation spirit of a Pittsburgh industrialist, Mr. James F. Hillman, a new state park will be established in the near future eight miles south of Raccoon Creek State Park. In January of this year, Governor Shafer announced that Mr. Hillman had given a tract of 3,654 acres, valued at more than one million dollars, to the state for park usage. This is about one-half the size of Raccoon Creek park and is the largest single land gift ever given for a state park in the nation.

Mr. Hillman is president of the Harmon Creek Coal Company which had strip mined and then restored the tract. It is an excellent example of how such land can be reclaimed.

Governor Shafer has requested funds in the 1969-70 capital budget to provide a master development plan for the new park which could come from the Project 500 funds. He has also suggested to the State Geographic Board that the new park be named Hillman State Park in honor of this dedicated conservationist. At the present time the land will be placed under the administration of Raccoon Creek State Park.

This would permit immediate use of the area by the public for sports such as horseback riding, hiking, hunting and winter sports such as snowmobiling and cross-country skiing.

Beaver County has many historical points of interest, the most famous of which is the restored Harmonist's village of Old Economy on Route 65. The Harmonists were a German religious group led by George Rapp who came to Pennsylvania to escape religious persecution in their country. They believed in a completely communal society, and later celibacy, which led eventually to their elimination.

Nineteenth-century buildings overlook the Ohio River. Buildings and gardens have been restored to look as they did when the Society thrived. Still standing are the Great House, the church, the music hall, a granary, community kitchen, cabinet shop, store, apothecary, tailoring shop, shoe shop, warehouse and Grotto. Two of the original dwelling houses also remain. Carriage house, greenhouse and gardens were also rebuilt. The area is managed by the State Historical and Museum Commission.

In great contrast to this reminder of earlier, quieter days are other tourist attractions in the county symbolic of modern America. At Shippingport tours can be arranged at the Shippingport Atomic Power Station, the first plant to produce atomic energy for commercial use. Conway has the world's largest yard for classification of freight cars, owned by the Penn Central Railroad, which handles more than 9,000 freight cars a day.

THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

PITTSBURGH SAFE BOATING COMMITTEE

IN THE WESTERN PART of Pennsylvania, at the confluence of the Allegheny, Ohio and Monongahela Rivers, is located the Pittsburgh Safe Boating Committee.

This organization, now about 12 years old, had been the first of its kind in Pennsylvania and in its February, 1968, Boating Bulletin claimed to be "the only permanently organized safe boating committee functioning in the United States."

The Pittsburgh Safe Boating Committee is not the type of organization which meets once or twice a year to plan for some special event. Instead it continues its sessions from one end of the year to the other, meeting monthly to prepare its campaign to promote safe boating in the Tri-River area.

As a result, it has a well-rounded program, a program which begins prior to the local Safe Boating Week observance with spot safety announcements on radio and television. Committee members are often found on local television personality shows; news releases are sent to newspapers, and there is always the Pittsburgh Boat Show every February, in which the committee participates.

Unfortunately, the committee does not have a budget. Where any expenditures are involved, it is generally up to the membership to dig deep in order to bear the financial burden. This is one reason the committee has never attempted to include commercially printed leaflets, handouts and bumper stickers in its campaign.



GETTING TOGETHER for a planning session are seven members of the Pittsburgh Safe Boating Committee. They are, left to right: Capt. Jack Ross, publisher, Three Rivers Boating Guide; Joseph Dick, James Smith and John Buck, all of the Pennsylvania Fish Commission; Fred B. Kissell, vice chairman; Thomas R. Parry, treasurer; and Paul Sowers, of the Pennsylvania Fish Commission.

Headed by Dale K. Williams, the committee had its beginning in 1957 when the first National Safe Boating Week was established by Presidential Proclamation. The U.S. Coast Guard was its first sponsor, and for three years directed the annual observance through local power squadrons and the U.S. Coast Guard Auxiliaries.

The committee then took over the local event and through 1963 its primary purpose was the organization and presentation of the annual Water Safety Show at Pittsburgh's "Point" during Safe Boating Week.

It achieved permanent status in 1964 when invited by the Western Pennsylvania Safety Council to serve as a subcommittee of the safety council on a year-round basis.

As a result, the committee's membership is made up of representatives of the following organizations: U.S. Coast Guard and U.S. Coast Guard Auxiliary, both in 1957; U.S. Army, Corps of Engineers, Pittsburgh District; Pittsburgh Chapter, American Red Cross; U.S. Power Squadron, Pittsburgh; and Western Pennsylvania Safety Council, all in 1960; Waterways Association of Pittsburgh, Propellor Club, Port of Pittsburgh; and Three Rivers Boating Guide, all in 1964; and the Office of Watercraft Safety, Pennsylvania Fish Commission, in 1965.

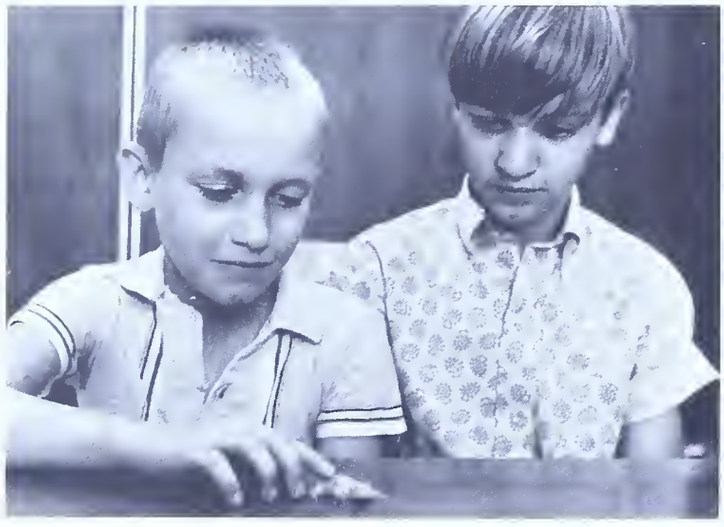
"All member organizations have continual representation on the Committee which is active year around, meeting monthly and more often, as necessary, in the coordination of programs, activities and planning for the promotion of water safety."

One of the committee's pet projects has been the distribution of a boating bulletin which is printed by the Corps of Engineers as a service to the boating public in cooperation with the Pittsburgh Safe Boating Committee.

Twenty thousand of these bulletins were printed and distributed at the Pittsburgh Boat Show, an event which provides the safety committee and its activities with plenty of exposure. Three printings of these bulletins are anticipated during 1969.

The bulletin is nothing elaborate. Printed on a standard size sheet of paper, it has a neat, commerical appearance, and does the job.

continued on page 27



UNUSUAL FIND—

BROTHERS JACK AND CHARLES HARDY, age 12 and 14, of Harrisburg brought a "one in a million" albino frog into Pennsylvania Fish Commission offices awhile ago. A young specimen, the frog was determined to be a true albino. The boys reported finding it while exploring a small stream emptying into the Susquehanna River near the Commission's Falmouth Access Area.

Named to Forestry Post —

A. C. LABRIE, former director of hunting and conservation activities for the National Rifle Association of America, has been named executive director of the Pennsylvania Forestry Association.

Most recently, Mr. Labrie was staff director for the National Society of Professional Engineers in Washington, D.C. He has had extensive experience in business management and public relations.

Born in East Providence, Rhode Island, Mr. Labrie graduated from Johnson and Wales Business College after serving with the U.S. Marine Corps during the Korean conflict.

He has been chairman of the Washington, D.C. Conservation Roundtable and holds memberships in the Wildlife Society, Izaak Walton League of America and the National Wildlife Federation. He is a life member of the National Rifle Association.

continued from page 3

LEAKY BOOTS

cluding fishing and boating. The department would better represent the fisherman. Interdepartmental cooperation could avert deleterious practices of mining, industry, transportation, lumbering, utilities, farming, etc.

Robert J. Bielo should abandon the armchair notion of maintaining an independent status for the Fish Commission and take consolation in that the "Pennsylvania Game and Fish News" will be 9″ x 11″ and 100 pages of highly readable material for Pennsylvania Sportsmen as the "Pennsylvania Angler" and "Game News" are today.

—Wayne G. Johnston, Cumberland, Md.

You are quite correct in noting that most of the states in the Nation have combined Fish and Game Departments, many of which are part of a larger conservation department or Department of Natural Resources. The first question I would ask you is that if such a combined department is so successful, how is it that Pennsylvania rates as the number one hunting state in the Nation, and with one of the lowest per capita acres of fishable waters usually remains in the top ten in fishing states?

Frankly, I think the answer lies in the fact that with separate agencies we are able to do a more effective and efficient job of management for our water users and hunters.

Multiple use of our outdoors resources is necessary and I believe you will find the practice of multiple use carried out in Pennsylvania to a much greater degree than it is in virtually any other state. It has been well demonstrated in Pennsylvania that Fish, Game, and Forests and Waters programs are coordinated to assure maximum use is made of our resources without jeopardizing the prime or most important use of any individual area.

Somehow or other the middle portion of your letter is unclear as you seem to favor hunting to such an extent that you fail to recognize that probably there are areas where other use is more important to more people. Some of our good fishing streams do fall on State Game Lands —and certainly that Commission is most cooperative in permitting us to stock these streams for fishermen use.

By the same token the Fish Commission provides a great number of access points along our waterways which are used quite frequently by hunters, as well as by our boaters and fishermen. I might add that waterfowl hunting does take place on most Commission lakes and to my knowledge there has never been opposition to this form of use of these properties.

The main point of my article is a real concern that in a vast Department of Natural Resources watersports and hunting could well be bypassed or given low priority, especially if the top administrator had limited basic interest and background regarding these sports.

As an example, much bitterness developed in a bordering state as recently as last year when conservation officials were concerned their programs were being slighted for the development of golf courses and public park areas where no fishing or hunting was permitted.

We are not perfect and never will be but one thing you may be assured of is that our total attention is devoted toward our responsibilities to making better boating and fishing conditions here in this Commonwealth.

I might add, I believe the separate system has existed in Pennsylvania for as long as it has because a good job has been done in outdoor recreation and woodland management.

—Robert J. Bielo, Executive Director



"SILO" TROUT—

Members of the New Jersey Fish and Game Council toured The Pennsylvania Fish Commission's research facilities at Benner Springs during the winter and took a look at the experimental "silo" in which 21,000 rainbow trout are being reared. The system is a new concept which researchers are hoping will prove effective for rearing fish in areas where space will not permit conventional raceways.



AWARD—

Philip Weiner (left), Associate Director of Philadelphia Sportmen's Show, presents George W. Schneck, President of the Pennsylvania State Fish & Game Protective Association, a trophy for the Association's wildlife exhibit selected as the "Most Outstanding Exhibit of Wildlife" at the 1969 Show held in Philadelphia in February.

continued from page 25

SEA BAG

For example, the contents of the February, 1968, boat show issue included:

Instructions for operating the new signaling device installed for the benefit of pleasure craft owners using the locks.

News from the Office of Watercraft Safety, Pennsylvania Fish Commission.

An introduction to the river locks.

Announcements of future events such as the annual water show sponsored by the committee.

Schedules of classes provided by local flotillas, U.S. Coast Guard Auxiliary.

Also, a brief history of the Pittsburgh Safe Boating Committee, its aims and objectives:

1. To promote safe boating practices among the pleasure boating population.

2. To promote attendance by pleasure boaters in safe boating classes held by recognized and reputable boating organizations.

3. To prepare, publish and distribute information in leaflet or other form that will, through its content, assist pleasure boaters in recognizing and correcting unsafe boating practices.

4. To continually endeavor to enlist the aid of individuals, organizations and governmental entities outside of Committee membership in furthering Committee objectives.

5. To support the activity of member and other organizations seeking attainment of goals consistent with Committee objectives.

6. To provide for exchange of ideas and discussion of mutual problems among the boating public, governmental agencies, commercial navigation interests and other interested organizations, and,

7. To engage in such activity as may be necessary to carry out these objectives.

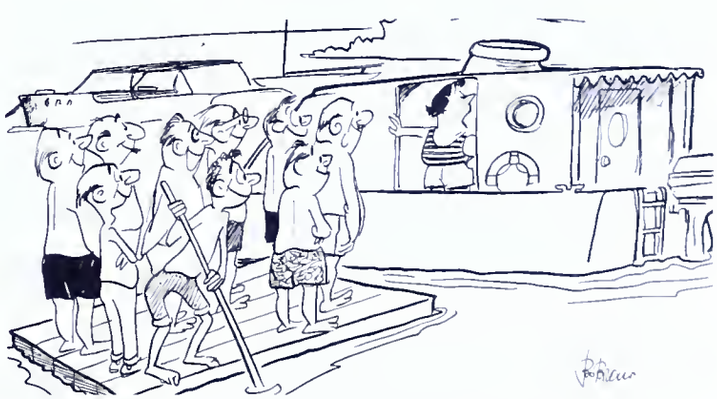
Officers are seated in October and remain in office until the following September. The present slate includes:

Dale K. Williams, chairman. Dale is Public Information Officer for the Pittsburgh District, Corps of Engineers.

Fred B. Kissell, vice-chairman. Fred is the former Safety Officer for the Pittsburgh Engineer District. Now retired, he serves on the committee as a private citizen because of his interest in the safe boating program.

Harry G. Benion, secretary. Harry, better known as Hap, is on the staff of the Western Pennsylvania Safety Council.

Thomas R. Parry, tresaurer. Tom is executive manager of the Western Pennsylvania Safety Council.



"A RAFT OF YOUR FRIENDS ARE HERE."

HEADS BOATING PROGRAMS

Capt. Charles E. Leising (USCG-Ret.) has been appointed Assistant Executive Director in charge of the Pennsylvania Fish Commission's Waterways Division. The position involves coordination, administering and implementing a statewide waterways program in enforcement, regulations, improving and maintaining waterways facilities and the waterways safety educational program. Capt. Leising replaces Commander Edward R. Tharp who resigned last May to accept a position in the U.S. Department of Transportation. Captain Leising reported for duty in early January.

Captain Leising graduated from the Coast Guard Academy in 1938 and received a master's degree in marine engineering and naval architecture from the Massachusetts Institue of Technology in 1946. He retired June 30, 1968 from Coast Guard service after a 30-year career which included considerable experience in organizing and administering the recreational boating and watercraft safety programs in the Great Lakes Region. For the past four years he has served in various command posts in the Coast Guard's Eastern Area and at the time of his retirement was Deputy Commander with headquarters in New York City. He is a member of the American Society of Naval Engineers.



CAPT. LEISING

ALLEGHENY COUNTY LEADS BOAT REGISTRATIONS

ALLEGHENY COUNTY, with 11,458 boats registered, led the state last year in numbers of active boaters, according to figures released this week by the Pennsylvania Fish Commission. The registration figures for the Pittsburgh area were almost four times higher than the next group of counties with registered boats, including Montgomery (3,665), York (3,583), Luzerne (3,594), Erie (3,911), Bucks (4,437), Daughin (3,298), and Mercer (3,133).

Other Pennsylvania counties which had more than 2,000 boats registered in 1968 were: Beaver (2,235), Cambria (2,042), Crawford (2,109), Delaware (2,467), Lackawanna (2,128), Lancaster (2,596), Lehigh (2,003), Northampton (2,013), Philadelphia (2,949), and Westmoreland (2,702).

A total of 94,800 boats were registered in Pennsylvania during 1968, an increase of about 12,000 boats over 1967. By law all boats propelled by machinery, except marine vessels registered by the United States or foreign governments, must be registered annually, at fees of $4.00 for boats under 16 feet in length and $6.00 for boats 16 feet and over. The same registration number will be reissued to the same boat as long as it is registered in Pennsylvania regardless of whether it is sold, repossessed, traded, or otherwise transferred to another owner. All registrations are processed for the Pennsylvania Fish Commission by the Miscellaneous License Division of the Pennsylvania Department of Revenue. Sailboats, canoes and rowboats are not required to be registered unless equipped with a motor.



J. K. ALBRIGHT of Armburst showed up at the Fish Commission's exhibit at the West Penn Sport Show in Pittsburgh last winter with a nearly complete set of fishing licenses. The only tag he didn't have was from 1925. That one was destroyed in a fire. Shown with him are Jim Smith, Waterways Patrolman for the southern portion of Allegheny County and the Commission's Assistant Supervisor for southwestern Pennsylvania, Tom Qualters.

MORE THAN 26 MILLION FISH STOCKED LAST YEAR

THE PENNSYLVANIA Fish Commission reported today that 26,212,969 fish were stocked in waters open to public fishing last year, an increase of 2,839,501 fish over the previous year. Final figures on the fish stocking program, compiled at the Commission's Benner Spring Research Station, show a total of 4,181,617 trout and 22,031,352 warmwater species were released.



THE DELAWARE COUNTY Field and Stream Association sets out each spring to REALLY stock their fish. Equipped with six modern, floating boxes—each holding up to 300 fish—they hike many miles of stream to assure good distribution of their fish.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



SIX YEAR OLD Carol Burkett of Glendale, Mo., landed this 23-in., 5½-lb. brown trout from Cove Creek while visiting her grandparents in Bedford last summer.

RANDY FORTNEY, 12, Titusville, won a Junior Fishing Citation and a Husky Musky Honorable Mention when he landed this 38-in., 15-lb. musky from the Allegheny.





A HUSKY MUSKY Honorable Mention was won by Walter Thomas Jr. of Perkiomenville, when he landed this 37 inch, 13½ pound muskellunge at Perkiomen Creek in southeastern Pennsylvania's Montgomery County.



ALLENTOWN ANGLER Joseph Sipotz caught this 27 inch, 8 pound walleye which is being held by Bart Strasser. It fell to the temptation of live bait fished on a tip up in late January.



LAKE TOHEE in Bucks County produced a 26 inch, 5 pound chain pickerel for Quakertown angler Arnold Irbens, who won a Pennsylvania Angler Fishing Citation for the catch. It hit a live minnow fished on a tip-up.



BEECHWOOD LAKE in Tioga County produced this 25 inch, 6 pound brown trout for fisherman James A. Pratt of Mansfield. He caught it on a minnow while ice fishing at the lake in February.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



BILL CLARK of Throop landed this 21 inch, 6 pound brown trout from Lake Wallenpaupack while ice fishing there this winter. It hit "live bait" on a tip up.

JOHN ANDERSON of Montrose landed this 22 inch, 6 pound, 5 ounce largemouth bass while fishing Montrose Lake in Susquehanna County. It hit a rebel.





CHAIN PICKEREL measured 27 inches and weighed 5½ pounds when caught by Blace Hotalen of Dingmans Ferry. He landed the Citation winning fish at Lattimer Lake in Pike County.



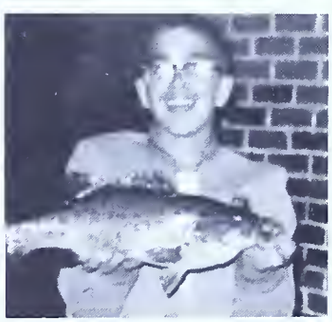
BERWICK ANGLER Steve Lipovsky. 15, won a Junior Citation for this 13¾ inch yellow perch which he caught from Lake Wallenpaupack. It hit a minnow fished on a tip up.



MARK AND ROSS PINGATORE, both of Somerset, hold stringer of fish they caught at a contest in the County last summer. The boys landed two rainbows and two largemouth bass.



BIG MUSKELLUNGE was caught by Oil City angler Robert R. Winger. He was fishing the Allegheny River in Venango County using spinning equipment and a white jig when the big fish hit. It measured 43 inches, weighed 25 pounds and won him membership in Husky Musky Club.



STANLEY BRACHT, 11, of York Haven won both a Junior and a Senior Fishing Citation for this 20¼ inch, 3¾ pound smallmouth bass. He was using a bucktail when he landed it from the Susquehanna River in York County.



BERWICK ANGLER, Bobby DeMent. 11, holds big channel cat he caught while fishing the Susquehanna near his home. It measured 24 inches, weighed 6½ pounds and won him a Pennsylvania Angler Junior Fishing Citation.



DELAWARE RIVER muskellunge was caught by Richard Frensky of Greenawald. It measured 32 inches and weighed 7½ pounds.



CLYDE BUELL, Fish Commission maintenance foreman of Region Two landed this largemouth at Lake Somerset. It measured 20½-in., weighed 4½-lbs.



TWIN BROTHERS Paul and Terry Ramsy of Bedford hold a 38 inch carp they captured at the Raystown Dam. After a quick trip home the excited boys placed the fish in the family hathtub and it was still living when this photo was taken.



FISHERMAN Walter Dayfert of Dickson City holds a 36 inch, 10 pound northern he caught in "a northeastern Pennsylvania" lake.



L. G. TAXACHER of McKees Rocks won Husky Musky membership and a Fishing Citation for this 46¼ inch, 23 pound muskellunge.



DONALD R. GEISS, Mansfield, landed this 42 inch, 18½ pound muskellunge while fishing Tioga County's Hills Creek Lake. The big fish was one of several taken there during the year. It won Geiss membership in the Husky Musky Club.



SUNBURY ANGLER Sol Klinger holds 21⅜ inch, 4 pound, 2 ounce smallmouth bass that won him a Pennsylvania Angler Fishing Citation. He used spin/cast gear.



NORRISTOWN fisherman Mrs. G. L. Sayre holds a 23 inch walleye, a 19 inch rainbow, and a 21 inch brown trout, caught on the last day of December at the Paupack.



FRANCIS MASIEWICZ, 15, of Scranton holds a 31½ inch, 2¾ pound eel he landed from Wayne County's Panther Lake.



GLENN DAILY of East Stroudsburg holds a 20 inch, 4 pound brown trout he caught while fishing Deep Lake in Monroe County. The 14-year-old was ice-fishing.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

HI-LA SPORTSMEN

OCCASIONALLY A COOPERATIVE NURSERY comes along with some unique features that set it somewhat apart from other nurseries that operate in a more conventional manner. Such a nursery is the Hi-La Sportsmens' Club in Elk County.

To begin with, the nursery site is in the Allegheny National Forest which requires a special permit or lease to the club before the land may be used. Following the granting of the permit, there are periodic inspections of the nursery by the forestry people to see that the club meets certain specifications in maintaining an attractive site and the functional value of the water source.

However, the really unique feature of the nursery is not its location but its automatic feeder. Harold E. McCauley, club secretary-treasurer, demonstrated the device for us on a recent trip.

Originally designed for cattle feeding on the western ranges, the feeder is a relatively large tank that sprays pellets through a device at the bottom of the unit. A timer and battery power complete the feeder which holds enough food for several days feeding.

In operation, the feeder is swung on a pipe over the two cement raceways. The timer is set and that's about all there is to it. A water-tight lid protects the food from rain and the lower spraying unit is likewise protected from the elements by a metal shield.

Harold mentioned the fact that some food is wasted and that the ponds need cleaning about once a month to eliminate the accumulated food in the feeder area. He felt that results—meaning trout growth and the saving on time and travel for the feeders—were satisfactory enough to warrant the feeder. He did note, however, that the brook trout showed better growth than the browns when the feeder was being used. Prior to the installation of the mechanical device, there was no noticeable difference in the growth rate of the two species. The club, incidentally, is raising 5,000 trout with half being brooks and the other half browns.

The essential diet of the trout, as a result of the mechanical feeding, is a dry pellet. McCauley did indicate that some variety in the diet is achieved by feeding ground liver about once a week as it is available. The trout grow well on this combination and are stocked before the opening of the spring trout season in Elk County waters. The club keeps no hold-over fish. And so much for the mechanical feeder, which is in its second year of operation.

A final unique feature is the name of the nursery itself. Set in a beautiful sylvan scene with evergreens and a gurgling mountain brook, the nursery site has the rather incongruous name of "Pig's Ear" for which there seems to be no logical explanation.

Now on to some other facts about this not-so-ordinary nursery. The two cement raceways were built in 1947, following the securing of a lease from the federal forestry officials. The current operation dates back to 1952 when the first trout were raised under the current cooperative nursery program.



TIMER OF AUTOMATIC FEEDER is inspected by club secretary/treasurer Harold McCauley and Paul Byers, assistant cooperative nursery coordinator.

Operating expenses for the nursery are no real problem. Drawings for sporting goods and club dues plus donations of materials and labor, according to McCauley, take care of the money issue. Along the same line of operating logistics, the club has about 450 members with 15 actively involved with the nursery and its operation. Among these is Fred Lorenzo, vice president, and one of the more interested members in the project.

Physically the nursery is in an ideal location with a good water supply, a shaded area against summer temperature rises and the whole project is enclosed by a high fence topped with barbed wire to keep out various kinds of predators. Natural predators still present a bit of a problem and local trappers ply their trade in and around the nursery property. Two mink had been taken just prior to our visit to the nursery in late December.

And that's about it for the Hi-La Sportsmen and their automatic feeder and "Pig's Ear" nursery except to say that *Casting with the Coops* never becomes a routine thing. There is always something different to find at the next nursery along the line as these sportsmen continue to serve their sport and their fellow fishermen across the state.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

FROM B. E. E., WEEDVILLE:

"Will I need anti-fouling paint on my fiberglass boat if I keep it in the water all year?"

—Absolutely. Marine vegetation will foul a fiberglass hull as readily as one made of wood or metal. Select an anti-fouling paint which gives good results in the waters where your boat will be docked; there are many types, and not all are effective in every location.

° ° °

FROM W. F. R., STAHLSTOWN:

"Can you recommend a list of things to do to get an outboard motor ready for the beginning of the season?"

—Assuming that you laid up the engine properly in the fall, a few hours of pre-season maintenance can pay big dividends in trouble-free service. First remove the shroud and carefully clean the engine, using a solvent or degreasing solution if necessary. Replace the sparkplugs, and if any of the spark plug wires are deteriorated, replace these also. Clean the fuel tank and filters; flush the fuel lines and carburetor. Lubricate all moving parts and linkages with grease or oil according to the manufacturer's recommendation, and drain and replace the lower unit lube. Check and tighten any loose bolts and nuts. Inspect the propeller carefully, and have it reconditioned if it is nicked or bent. If the engine has an electric starter, check and clean all leads and connections.

° ° °

FROM P. L. K., FALLSTON:

"The canvassed cabin top of my cruiser is covered with cracks; how can I refinish it?"

—If the canvas itself is still sound, use any good paint remover to soften the paint, and remove it carefully with a dull scraper. Several applications of paint remover may be requred to get through a heavy buildup of old paint. When the surface is dry, sand lightly and apply two or three coats of marine enamel. If the canvas is split or rotten, remove it and all traces of the old cement, and replace with glass or dynel cloth.

° ° °

FROM W. D. S., ROARING SPRING:

"My pre-war inboard runabout is finished all in varnish, and the deck seams are filled with a white sealer that has dried out and needs replacing. What is the best method and material for this application?"

—For lasting results, use a synthetic rubber caulking like Kuhl's Rubber-Tex. You can avoid making a huge mess by running a strip of masking tape along each side of each seam, and after filling the seam, use a moistened finger to smooth out the excess caulking and leave a neat, concave surface.

° ° °

FROM J. R. F., MASONTOWN:

"Contrary to what you wrote in the September Angler, the Continental Engine Co. does not handle Gray Marine parts. Where can I get a manifold for a model FB-140?"

—Shortly after we said that Gray parts could be obtained from Continental, the entire operation was purchased by Stokes Marine Supply, 498 E. Chicago St., Coldwater, Mich. 49036. They should be able to supply the manifold you need.

° ° °

FROM M. W. H., PITTSBURGH:

"Is it better to change the crankcase oil in an inboard engine in the spring or in the fall?"

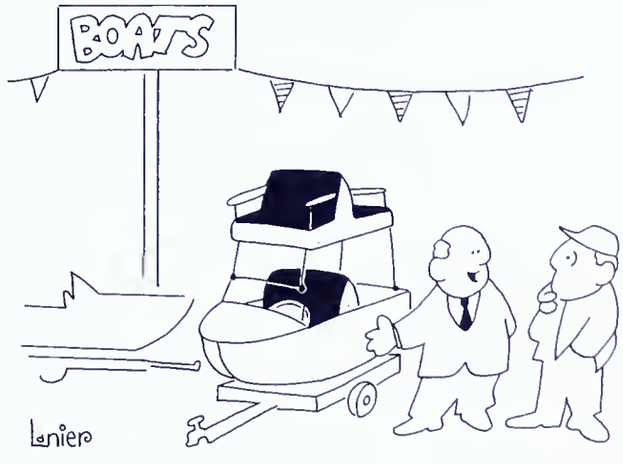
—Best time for a seasonal change is in the fall, when the boat is laid up. Leaving dirty oil in the engine over the winter can cause acid corrosion of bearings and other surfaces. Oil should also be changed after every 100 hours of operation, regardless of the time of year.

° ° °

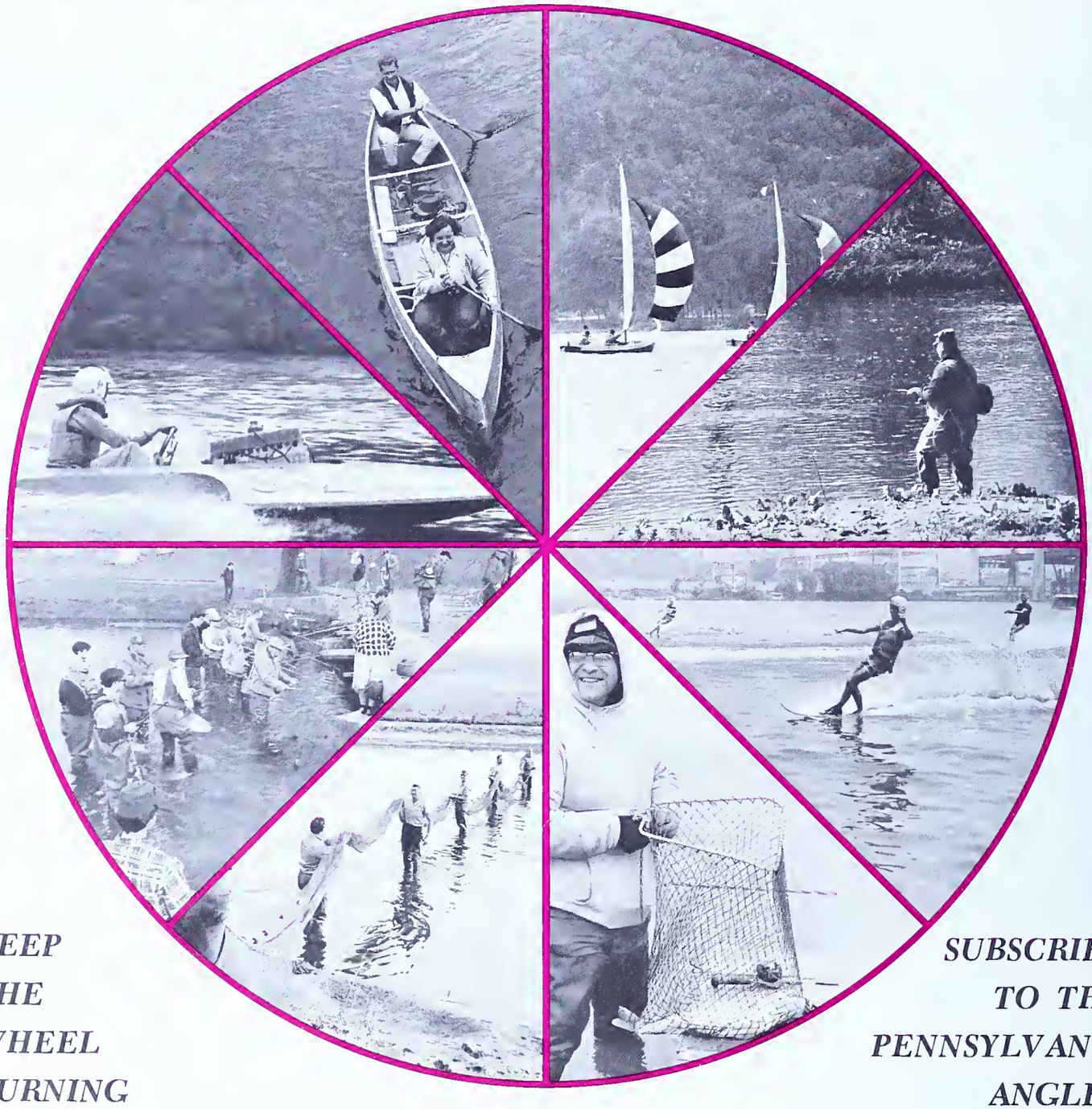
FROM R. V. C., McKEESPORT:

"My planked boat usually requires steady pumping for two days after launching, until the seams tighten up. Last year I caulked the seams with compound, but it all squeezed out. How can I avoid the pumping without messing up the bottom again with pushed-out caulking?"

—Fill up the boat with water every day for a week or so before launching, to help swell the planking in advance. For the higher seams, or those which just refuse to close, soften a cake of hand soap and daub this into the cracks. The soap will dissolve and disappear as it is squeezed out.



". . . AND THIS LITTLE MODEL SEATS 4 COMFORTABLY."



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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



Waterway Courtesy

We can expect 100,000 Pennsylvanians will register boats for use on Commonwealth waters this year. Some folks will use their boat for towing waterskiers, others will be mainly interested in pleasure cruising, fishing, houseboating and of course many will use their boat for all of these things. Thus, as you would expect, persons operating boats in Pennsylvania have a diversity of interests. Some will be on the water several times a week, others may be limited to using their boat on only a weekend or two.

Regardless of the personal difference in boating interests, all persons operating motorboats must have a common concern for safety afloat. This concern must include the other boaters operating in the same area, swimmers, passengers and actually anyone who might be affected by the way the boat is operated.

Safe boating is not difficult to practice nor is it necessary to curtail your boating pleasure to operate safely. Application of common sense, courtesy and genuine concern could virtually wipe out boating fatalities and greatly reduce all types of boating accidents.

The horrible safety record on our highways should serve as an example of what can happen when common sense, courtesy and concern for safety are ignored or considered only for the other driver. All the laws and rules that govern auto and truck traffic are merely words on paper unless the individual who drives makes them a part of his or her personal credo.

The use of our waterways for recreation is really just at a beginning stage of development and participation. Thus now is the time for each waterway user to make safety afloat a habit. The fellow with the tiny 1.5 horsepower outboard, the sailboater, the canoist or the boater using the most powerful propulsion system available all have equal responsibility to use common sense afloat, show courtesy for other waterway users and be honestly concerned about keeping our waterways safe for all who wish to enjoy them.

DIRECTORY

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PENNSYLVANIA ANGLER

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★

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

JUNE 1969 VOL. 38 NO. 6

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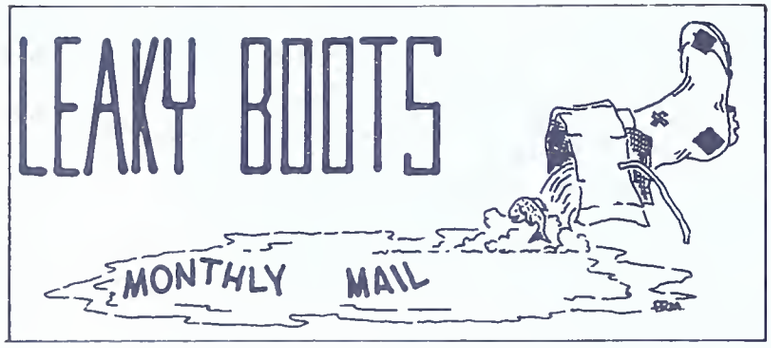
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COMMENTS ON SOUCHAK LETTER—

Dear Sir:

I'd like to comment on the letter from Larry Souchak of Mahoning City which appeared in your March issue.

I think a man should be able to fish anyway he wants to within the limits of the law, with any type of rod he chooses. Everyone doesn't like to fly fish. If one wants to fish with a fly rod fine, but fly fishermen shouldn't try to force everyone else to use the same method.

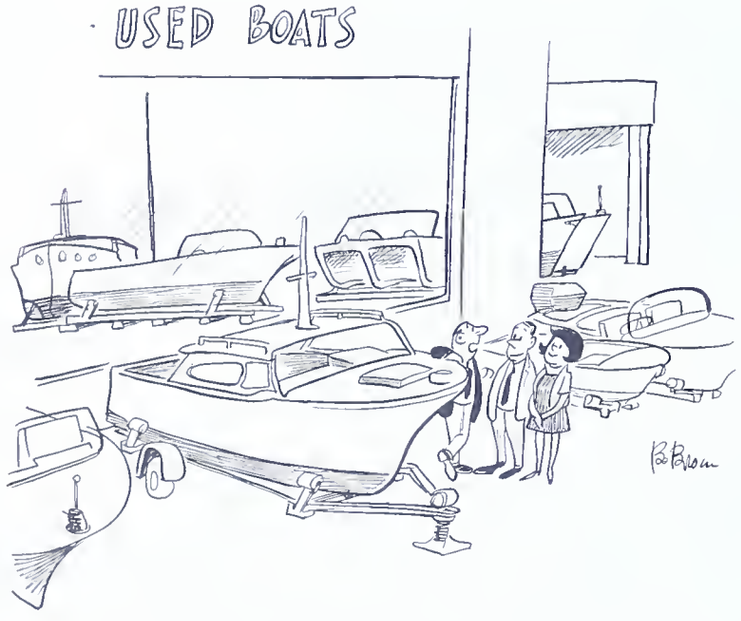
Mr. Souchak's suggestion to drop the age from 16 to 14 is also foolish. A lot of people in low income brackets have children and this might prevent a lot of children from fishing.

So far as a special trout stamp is concerned I say just issue one to Larry Souchak. He says that he doesn't mind paying extra, but if the price of the fishing license would raise he would probably be the first to complain.

The fishing button business is also foolish because of extra cost to the state and have the "license showing" for the waterways patrolman. He will tell you in a very few words if you aren't wearing that tag—just try fishing without wearing one!

I purchase a license every year and I feel I am not issued that license to check on the fishing equipment of others, be it license wearing or all of the other things that Mr. Souchak seems to be checking on. I buy mine to fish, not to go looking for faults in others and their methods.

—Frank Ullom, McKeesport



"IT BELONGED TO A STATUS-SEEKING LANDLUBBER WHO ONLY TOWED IT BEHIND HIS CAR TO IMPRESS THE NEIGHBORS!"

WONDERS—

Gentlemen:

I enjoy your letters very much, but sometimes they make me wonder.

After reading your current issue (March) of the Angler this question comes to mind—is Mr. Souchak a "good fisherman" or a so-called "fish hog"? I think he may be in the latter rack.

He wants the streams and lakes for a few fly fishermen.

I am a novice, have been fishing for 70 years but I enjoy it. I think spin fishing is a great sport. When I get out along the streams I see many more folks spin fishing than fly fishing. Evidently the most of them enjoy this type of fishing.

I think there already are too many sections of our streams reserved for fly fishing people.

As for trout stamps—I say no. They would stop many persons fishing, especially the young folks.

When God made our streams, he made them to be used by all.

As for lowering the license age to 14 years, again I say NO. These two years (14 to 16) are critical in a young person's life. I would rather see them out along a stream fishing than standing on the street corners, getting into trouble.

I also take exception to Mr. Bray's letter (March) on historical items such as "Pithole"—give us more of them. If more history were taught in our nation, we might have more patriotism.

The damages "Pithole" did to our streams are long past —let us correct the pollution damage that is being done now.

—W. S. Bentz, Harrisburg

ONCE IN A MILLION—

Gentlemen:

Here's a story about a fellow fisherman that would happen about once in a million times.

Vine Lee, an ardent fisherman, was fishing in the Susquehanna River for bass and walleye at Durell. After fishing for a half hour without any success, he suddenly had a strike out in the main current. He pulled back on his rod instantly and at once he knew he had a big fish on. While following the fish downstream and carefully playing it for ten minutes, he finally brought it in the still water near him.

Having the fish completely played out he pulled it up on the shore. There it was—a thirty inch walleye, the biggest fish Vine had ever caught!

Looking closer he noticed something funny. The fish's gills were completely entangled with monofilament line.

Vine had foul hooked the fish in the mouth and had caught a dead fish that someone else had lost recently!

—David Norton, New Albany

DEAD SNAKES—

Dear Sirs:

In answer to Edwin F. Beistel's letter (March) inquiring whether his 34½" copperhead approaches a record.

I have an old farm which I use as a summer home, along Paddy Mountain, three miles from Weikert. Last summer in an area of 50 feet diameter I killed three copperheads on different days. The largest was 37"; the other two were 36".

Two other snakes (copperheads) that were smaller and not measured, contained 14 and 18 small snakes respecively. We also killed three later on that were 8 or 9 inches long.

—C. O. Raback, Milton

LIVE SNAKES—

Gentlemen:

In reference to Mr. Beistel's letter in the March issue of the Angler—I am curious to know how the large copperhead "apparently attacked" him. It has been proven that a snake can only strike at a distance of one-half its body length and I doubt very much if Mr. Beistel was pursued by the creature. Most "sportsmen" of the old school have the theory that the only good snake is a dead one. Chances of being bitten by a poisonous snake are less than that of being struck by lightning. As a biology teacher it is my hope that youngsters can be educated in the ways of the wild so that they will have tolerance for wild things, whether they be predator or prey. It is much easier to avoid a snake than to kill it and the risk taken is certainly less.

As a point of information, Conant's Field Guide To Reptiles and Amphibians lists the record northern copperhead as 53 inches, but fails to mention where it was recorded.

Keep up the good work on your interesting, informative and lively magazine.

—Tom Fegely, Coopersburg

* * *

Angler readers will find a story called "Snakes Alive" on pages 24 and 25 of this issue. It's all about a man who doesn't kill snakes.

—Tom Eggler, editor

SAW IT FIRST!

Gentlemen:

Almost a year ago I was fishing Potato Creek at the old iron bridge at Crosby—there were two men on the bridge watching about 6 men and one woman who was about 75 years old. She was downstream about 75 feet when she began to yell "Oh, oh I just saw a fish 24 inches long going upstream—don't you men get it, it's mine, I saw it first."

I didn't fish there—it would have been hard to tell the woman I had seen the fish the year before.

—Joseph E. Swain, Jr., Hazel Hurst

FISHWAYS INTEREST—

Gentlemen:

I have been reading the Pennsylvania Angler for quite a few years now and I have found some very interesting articles, but to date the issues where you have started to take an interest in the migration of the American shad (February, March 1969), have been by far the most interesting.

I fully agree with Mr. Bielo's idea of getting the fishways at these dams. I realize this is going to be quite a job, but I think that in the future it will be well worth the labor and headaches involved.

I am sure that most of your readers don't realize that shad fishing in the lower Susquehanna back in the 1800's was a way of making a living for quite a few people. If the fish came up the river before the dams were built, I would surely think they would come up again with the use of fishways.

I have fished for shad for some years now in Maryland and I must admit that every year the fishing gets worse. The most important thing that we must consider in this issue is the COMMERCIAL NETTERS. Every year there are tons and tons of shad netted before they ever get to their spawning grounds.

What good are the fishways going to be if the shad are going to be netted before they ever have a chance to reach the fishways?

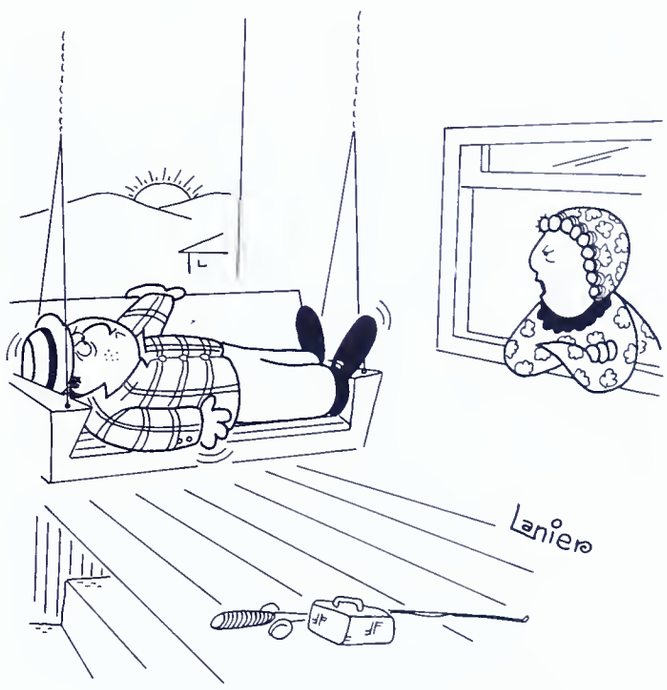
—John F. Geesey, Brogueville

ENVYITIS?

Sir:

When I start reading the Pennsylvania Angler I am rather happy thinking how great it all is until I reach the Fish Tales Section. Then I get a queasy sensation in the stomach and turn a horrendous pale green-yellow color. Do you think I suffer from envyitis?

—Jim Bray, Guys Mills



"DIDN'T YOU HEAR THEM HONK?"



FISHING OUTLOOK

By-- Stan Paulakovich

LURE OF BASS

AS THE EARLY SUMMER SUN slowly falls behind the curtain of the distant horizon, a pair of fishermen are silhouetted against a backdrop of green. The oarsman threading his way through stumps, bushes, weed beds and snags keeps the boat in perfect fly-rod range for the fisherman seated in the rear of the boat. With the precision of a pro quarterback he places the hair frog lure into each pocket of open water or at the base of each snag. The pair slowly cover every likely looking spot in the lake's shallower upper end.

With a quiet splat, the lure lands in an open patch of water at the base of a stump surrounded by lily pads. As the ripples ring out from the lure, the slack line is picked up and he waits. Beneath the surface about ten feet away lies a six pound largemouth bass. With glaring eyes it watches the intruder which has chased it from its domain. After all the ripples have subsided, the first twitch of the rod tip imparts movement to the lure suggestive to the bass of life and food. With a quick rush the hair frog is engulfed in its mouth in a spray of froth. Hang on—it's a beauty.

With the opening date for large and smallmouth bass on June 14, all of Pennsylvania's game fishes are now in season. June is a fine fishing month. Whether you concentrate on trout in the early morning and late evenings or fish for walleye, bass and musky, or content yourself with excellent family fishing for catfish, rock bass, blue gills or crappie, all are extremely good.

Fly fishing for trout during June should be confined mostly to the early morning and late evening hours. Most of the aquatic insects that hatch in June do so during these periods. The first week still has quite a good Drake hatch. Patterns that have proven themselves to be trout takers for this period include the Watery Dun, Pale Evening Dun, Ginger Quill, Hendrickson and the Light and Dark Cahill. Tied on rather large hooks sizes 10, 12 and 14 these patterns are among the most effective known.

When the bass season begins two distinct types of fishing present themselves. The largemouth is primarily a pond and lake fish and is readily taken on surface lures, such as the Jitterbug, Crazy Crawler, Vamp Spook and the Injured Minnow. Also on popping and dear hair bugs. Cast into open pockets or at weed bed edges and allowed to sit still awhile before moving, these types of lures are unbeatable. The smallmouth, basically a large stream or river fish are more readily taken on live bait. Top producer during June is the helgrammite. Seine for these in the fastest riffle you can find. Helgrammites will often take bass when nothing else will. And they are also good bait for trout and walleye.

One of the most overlooked fishing resources during June is the tremendous fishing for pan fish, including blue gills and rock bass. Most of our lakes and dams have good populations of creel size blue gills. Taken on small popping bugs with light leaders these bantam weight fighters will test the ability of any fishermen. Rock bass fishing during June is also outstanding. All along our major rivers and some of our larger streams, rock bass are one of the best family fishing potentials of any. Top areas include the North Branch of the Susquehanna, Delaware River, Allegheny River from East Brady to Warren, the Schuylkill River, Lake Wallenpaupak, Conodoguinet Creek in Cumberland County and Swatara Creek in Dauphin County which yielded the current state record, a 15 inch, three pounder caught in 1966. Top choice of rock bass water in the state according to Waterways Patrolman Dick Owens (123 Spring St. in Lewistown, Zip 17044, Phone 717-248-4124) is the Juniata River in Mifflin and Juniata counties. Dick says of this area "under utilized, not uncommon to catch 40 to 50 in a couple of hours of fishing. Women and children should be encouraged to participate. Quickly generates and holds interest." Baits which will take rock bass include worms, minnows, crickets, helgrammites and meal worms. Lures of the spinner or spoon type in small sizes, either silver or gold are used with great success.

Another tremendous area for pan fishing is the Conowingo Pool of the Susquehanna River, for crappie. Sam Hall, Waterways Patrolman of Lancaster County (R.D. #2 Box 267 Lititz, Zip 17543, Phone 717-626-2542) says of this area, "I have seen fishermen take 25 crappie on 25 consecutive casts." Recommended lures here are small darts or jigs or small live minnows. Fishing is good both from the shoreline or from an anchored boat casting to the shore.

Take a family fishing trip in June—you'll all enjoy it!

COMING - - -

BASS SEASON BEGINS

Pennsylvania fishermen who find fishing for bass their favorite sport can go at it again this month. Season starts June 14 so fishermen after these freshwater fighters better start unpacking their gear soon!

RIVER RENAISSANCE WEEKEND

Boaters looking for an exciting way to watersport away a weekend may want to mark June 14 and 15 down on their calendars. That's the weekend the Three Rivers Improvement and Development Corporation—TRIAD—has set for the second annual River Renaissance Weekend in Pittsburgh. Organization president Arthur V. Harris says "a beauty pageant, a big boat parade, a fishing contest, hydroplane racing, water skiing, parachute jumping, air-sea rescue demonstrations, and boating safety demonstrations" are just some of the things that will be happening.

COHO

What's happening with all those coho in Lake Erie? More information—including an article on what lures to use—is scheduled for some near future issues of your Angler.

BUSY BOATERS

During the summer months various boating events will be held on many Pennsylvania waters. You'll find weekend sailboat races, skiing contests, wildwater races, and power boat competition throughout the state. If you're a budding boater discover the fun of competition, either as an observer or a participant. Contact a boating club in the area you'll be visiting for information about "what's happening!"

TO TROUT

Beginning with this issue of your Pennsylvania Angler is a story called "To Trout With Love." Written by fly fisherman R. T. Trimmer, it should provide some interesting reading for Pennsylvania Angler readers who find fun with a fly rod. It's scheduled for continuation during the July and August issues so don't miss Part One.

THE TIMBER RATTLER-

HORRIDUS IS A RATHER UNPLEASANT sounding word, and well it might be, for it makes up part of the scientific name of Crotalus horridus horridus, or, Pennsylvania's Timber Rattlesnake.

Timber rattlers come in two distinct color phases: black and yellow. This is merely a color variation and has nothing to do with the age or sex of an individual reptile. Rattlesnakes are found primarily in the mountain sections of Pennsylvania, but, by no means are confined to these areas. They can be found anywhere there is ample cover from the hot sun and a good food supply.

Small rodents and birds make up the majority of their diet, but anything small enough to swallow will do.

Some folks still cling to the idea that a rattlesnake will always give a warning rattle before striking—don't believe it. When you surprise a sleeping rattler at close range, he is the more frightened, and won't take time to give you a warning about what he is going to do.

Nor do rattlesnakes have to be coiled in a classic pose to be able to strike. Snakes are little more than muscle their entire length, with great control over their actions. Striking out from any position is possible, although the length of the strike is often determined by the time and advantage given to the snake.

Striking at humans must be considered a purely defensive action. Snakes will, of course, glide away and disappear into the landscape whenever possible. Rattlesnakes don't look for arguments with humans, and will always try to escape unless provoked or cornered.

His rattle, more like the sound of a singing cicada, is



produced by extremely fast vibrations of the brittle segments on the rattler's tail. Counting these segments is not an accurate way to determine the age of a rattlesnake. These segments can be broken off and the rattler adds a new one each time he molts, or sheds his skin, which might be several times a year.

In any color phase, the timber rattlesnake is quite beautiful. When you come upon a rattler, make a wide detour. Leave poisonous snake handling to the experts. Venom from a rattlesnake bite can cause serious permanent injury, violent sickness, fever, and shock.

Venom is injected into prey through two curved hollow fangs, from a gland in the rattlesnake's upper jaw. Pressure from the closing jaws squeezes the venom into a victim; and in the case of small rodents, renders them lifeless in a matter of minutes.

Should a rattlesnake lose one or both of its fangs, they are quickly replaced by a reserve supply which is continually growing. I have the skull of one specimen which has seven fangs in varying stages of development. These are stacked, or lined-up one above the other in the roof of a rattlesnake's mouth.



by Ron Jenkins

Like most creatures, Pennsylvania's rattlesnakes enjoy warm sunshine, but not too much of it. Being cold-blooded reptiles, rattlers seek shelter from extremes in summer temperatures. Hikers should be careful when climbing among rocks or over deadfalls. Any shady nook in the woods on a hot day could harbor a resting rattlesnake.

The dens are usually found off the crest of a ridge, among rock formations, and on the sunny side of a slope. Snakes found in a large den can number in the hundreds. A normal birth usually produces 7 to 12 young, born live in the fall before the parents go back into the dens.

Most adult humans can survive a rattlesnake bite, even if left unattended for several hours but whatever you do, try not to put yourself in a situation where you will have to prove this statement.

When traveling in remote sections of the woods, always be within hearing distance of a friend. Be especially careful around rocky areas; rattlesnakes "den up" in these areas in large numbers, and come out in warm weather, usually May and June. Wear protective boots when hiking, and carry a hiking stick. Your time in the out-of-doors can best be enjoyed when you know you are prepared, and protected.

If you are bitten by a rattlesnake, or other poisonous snake, *remain calm.* Do nothing to cause unnecessary exertion and do not take stimulants. This only increases the flow of blood along with the venom, to other parts of your system.

Rattlesnake venom is primarily hemotoxic. Although it acts on your bloodstream, it also attacks nerve centers. If available, apply ice to the wound to reduce pain and swelling, and retard the flow of blood away from the affected area. Unless you are too far away from medical help to receive an antivenin within a few hours, it is not advisable to use the old tourniquet-incision treatment. Too often, permanent injury to muscles and tendons is the result of improper cutting of the wound. This should be used as a last resort; so, keep your snake-bite kit with you. It might save your life in a bad situation.

Get to a hospital or other treatment center as soon as possible. The best treatment for rattlesnake bite is administration of antivenin. Even though you may have had no other treatment for several hours, your chances of being killed from the bite are small, if medical help is obtained.

A lot depends upon the health of the bitten individual. His resistance physically, and emotionally, are quite important to his well-being and ability to remain calm under the stress of a poisonous snake bite.

It helps the attending doctor to know what kind of snake bit you, and how big the snake was. So, keep your cool, and be observant. "Bring 'em back alive" applies to people too. . . .

IF YOU HAVEN'T BEEN CATCHING FISH THEN MAYBE YOU HAVEN'T BEEN USING THOSE. . .

BILLBOARDS FOR STREAMSIDE READERS

by
Don Shiner



FISHING COULD BE a whole lot easier if there were printed signs and posters scattered about in the water telling us where to, and where not to, cast our line. We'd spend less time fishing unproductive water and maybe we could catch one on almost every cast.

It took some doing on my part to realize that such signs already do exist. There are signs and posters, all clearly legible, that tell anglers where fish are located in the stream or pond. When we take time to read these carefully, our pole bends far more often.

These billboards point out where big, lunker size, game fish loaf.

Trouble with fish is that they like to spend time near cover and have some shelter over their head, just as other creatures do. For example, big trout, where possible, hide beneath hollowed out banks and, like woodchucks, enjoy the security found there. They also hide beneath logs, or near them, as well as driftwood, boulders, ledges, and even deposits of leaves and twigs off to one side of a frothing waterfall. This is "home" to them, in one sense of the word.

Bass and arm long size pike hide in thick weed beds, beds of lilies, under old stumps or logs, and even stake out a residence in an old rubber tire rolled in and junked by some unthinking person.

Fish are attracted to these places so they can hide from the world. True, their coloring usually blends with these assorted backgrounds and they therefore have more opportunity to catch food which slips unsuspectingly into view. It is also true, in some ways, that heavy cover protects them from their enemies—ospreys, eagles, minks, bears and man. These have difficulty climbing through or past the obstacles to catch them. Even fishermen have difficulty drifting lines and baits into, say, log jams without getting "hung up." When lines foul and hooks snag, fish know darn well that the baits are traps for them.

But all this is a bit beside the point which is to look for and read all the signs which disclose the likely loafing spots of big fish. Pass up shallow, open water and concentrate the time fishing near the billboards. Some experts even suggest that we should spend twenty minutes or more reading a stretch of water, and then only five to ten minutes fishing it. They say that that is all the time it takes to catch a big one, usually, after you've located the spot where he's most likely to be.

Fishing beside these sign posters—the brush pile, log, even cold spring inlet—may cause the loss of some tackle like a few hooks, flies or a bit of leader. But trophy size browns, pike and bass are worth a slight loss of minor tackle now and then.

So let's spend some time reading the billboards posted in the streams and ponds. By carefully reading the natural billboards and sign posters, your pole will bend far more often.

FISHING MIGHT BE a whole lot easier if posters were scattered about telling where to cast—but the signs are all there, for the fisherman who knows how to read them!







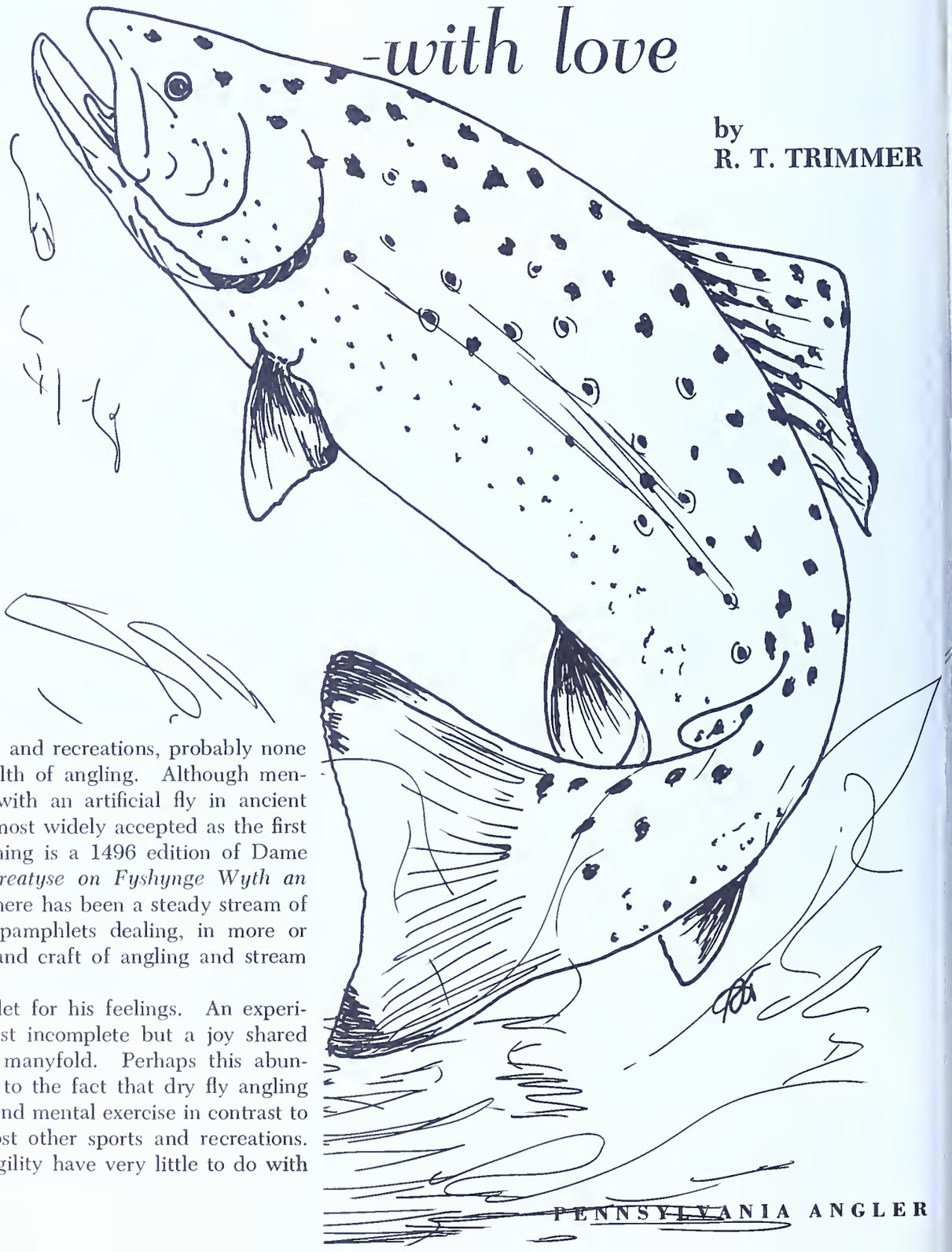
BIG TROUT can be found in or near undercut banks, along the shady side of a log, below waterfalls and near spring inlets (top photo) while the favorite spots for big pike are weed beds, beside and beneath logs, and on the lee points of islands (center photo) while big bass choose old stumps, weed beds, coves beside deep drop offs and old logs (bottom photo). Knowing where the species you're after lives will have a marked effect on success.

Beginning this month trout and fly fisherman R. T. Trimmer sets down some of his thoughts on the sport. It will be continued through the July and August issues and it's called . . .



TO TROUT *-with love*

by
R. T. TRIMMER



Of all of man's pastimes and recreations, probably none have had the literary wealth of angling. Although mention is made of angling with an artificial fly in ancient Greek writings, the book most widely accepted as the first volume on modern fly fishing is a 1496 edition of Dame Juliana Berners' classic *Treatyse on Fyshynge Wyth an Angle*. From that date, there has been a steady stream of books, monographs, and pamphlets dealing, in more or less detail, with the lore and craft of angling and stream management.

Man must have an outlet for his feelings. An experience enjoyed alone is most incomplete but a joy shared with others is multiplied manyfold. Perhaps this abundance of literature is due to the fact that dry fly angling is primarily an emotional and mental exercise in contrast to the physical efforts of most other sports and recreations.

Physical prowess and agility have very little to do with

the success or failure of an angler's venture. This is especially true with dry fly angling. The performance of the act of fly casting naturally requires open, brush-free, and relatively level ground. Therefore, access to the streamside area is usually not too difficult to attain. Conservation minded, Governor Pinchot saw to it that roads were provided in most of the rural areas of the state, where these streams are located.

A remarkable percentage of the anglers found in and along the fly fishing streams of the Commonwealth are elderly retired persons, a great many of them women.

Many anglers prefer to join the fish in the stream, wading as they cast. Even this practice is not an insurmountable obstacle for most anglers. Though some of the wilder areas of the Commonwealth have deep and swiftly rushing streams, all Pennsylvania streams have shallow, level stretches wherein wading is an easy and rather pleasant experience, especially on exceptionally warm days in late summer. The most important thing to remember is that angling is a sport that can be enjoyed by anyone provided the most basic safety precautions are understood and met.

The most rewarding goal to mankind is that goal which requires the greatest effort to attain. This holds true in recreation as well as any other pursuit—possibly more so! The demands made of the dry fly fisherman in the quest of his pastime are possibly the most exacting of any angler. This art may even be the final stand of true craftsmanship. The key to his success is not a simple approximation or the easy casting of a bait into the water, it is the most exacting handmade imitation, in materials completely foreign to the trout stream, presented in such a way as to entice a worthy opponent into battle.

The game of angling begins, not with a hooked fish, but with the fabrication of a bait and the initial cast of that bait upon the stream. The aim of the angler is to tease, tempt, or otherwise torment a game fish into eating something he would blithely ignore in the ordinary course of events. Unlike the ravenous beasts of the deep ocean or the viciously striking gluttons of the warm water lakes and streams of the Commonwealth, trout are gourmets, persnickety sippers of supper who inspect each morsel of food very carefully before eating it.

Angling is a battle of wits fought in the enemy's element and on the enemy's terms. Fish lead a rather simple-minded existence. They know what they can eat and what can eat them. Anything that looks inedible in their normal environment is a potential threat to their existence and will send them scurrying for cover. Mr. Lincoln's thoughts on fooling people apply as well to our finned adversaries. You can fool all of the fish some of the time, but you cannot fool all of the fish all of the time. Yet this is precisely what the angler is trying to do. No angler sets out to fish without at least a faint hope of "tying into that big one."

Seeing that the angler is competing with the toughest opponent of all—Mother Nature—it is no wonder that it has been estimated that a scant 10% of the fishermen catch most of the fish. Considering this information, it would appear there is a certain amount of skill and know-how associated with being a successful dry fly angler.



PART I—INSECTS

TWO FACTORS ARE OF PRIME IMPORTANCE in dry fly angling: the qualities of the lure, and the manner of presentation. A general consensus of opinion among dry fly enthusiasts seems to afford very little difference to the importance of each of these factors. Expert presentation of a poor quality fly is no more likely to gain success than poor presentation of a fly of excellent quality. One without the other is valueless. However, since the fly must be manufactured before it can be presented, let us investigate this phase first.

Of the estimated 900,000 odd species of insects in the world, only a few lend themselves well to the purposes of the dry fly angler. Many are too large to fabricate floating counterfeits. Many more are unavailable in areas where trout abound for various reasons. Therefore, we will dwell on a very few species which have been tried and proven to be popular fare on Pennsylvania trout menus.

THE MAY FLY

If a dry fly angler were permitted to imitate only one species of insect, that one must certainly be of the order *Ephemeroptera*, the beloved May Fly. It is an unquestioned fact among dry fly men that the time to fish is during a May Fly hatch. At that time only, almost any approximation of the natural insect will bring flyrod action. Even a floating milkweed seed has been known to bring on a strike. But when the hatch is over, we must immediately return to our more exacting standards.

Other common names such as shad fly and day fly (in reference to the brief life span of the species) have also been used for these insects. They are generally regarded as very beneficial to man, due to their tendency to destroy unwanted aquatic vegetation. The angler is especially appreciative since the insect comprises from thirty to eighty percent of trout diets. The life cycle of the May Fly is

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TO TROUT -with love

composed of three phases: the nymph, the subimago, and the imago or true adult.

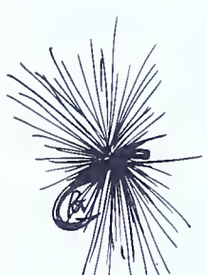
The nymphs are found in nearly all unpolluted fresh waters with a few species in brackish waters. They may be distinguished from other fresh water insects by the unusually large thorax region, a single claw on each leg, and the segmental arrangement of the abdominal gills. The most common types of nymphs are the very active, fish-like, free swimming forms; the somewhat less active, yet highly mobile, crawling forms of the pond and stream bottoms; and the relatively inactive, flattened forms which spend the greater part of their lives clinging to rocks and weeds.

The duration of the nymphal period in the life cycle may be as long as two or three years or as short as fifteen days. However, in most cases, this period lasts from six months to about one year. During this time, more than fifty moults may occur with corresponding growth between each moult. It is during this period that the insect takes nourishment, living almost solely on aquatic vegetation. When development in the nymph phase is complete, the insect rises to the water surface by swimming, crawling, or by the activation of a clever flotation device, depending upon the nature of the species; whereupon the dun or subimago phase escapes through a dorsal split in the skin.

It is at this point, the subimago phase, the May Fly evinces its unique property, that of being a characteristically complete adult insect without the ability to reproduce. It also differs from the true adult insect of its class in its duller coloration, transluscent wings, and shortened legs and tail parts. After a short flight period varying from a few minutes to two or three days, the subimago comes to rest, casts off the skin or pellicle and frees the true adult or imago.

In the adult phase, May Flies are easily recognized by their short antennae; inoperative mouth parts; upright, triangular membranous wings, which are usually heavily veined with the forward pair greatly enlarged; and their two or three tail-like filaments. The adult stage is the shortest lived of the three. In some species it may be as little as a few hours, but in most, varies from one to three days, with but few species attaining the three-day life span. After a brief but spectacular nuptial flight with literally thousands of the pale, delicate insects cavorting just above tree top height, the males fall to the surface while the females, brilliantly colored egg sacs distended, dip to deposit the fertilized eggs on the water before collapsing to die in their watery nursery. While most forms simply drop their eggs on the water, a few species actually dive beneath the surface to affix their egg masses to rocks and underwater growth.

The May Fly season lasts approximately three months and the three months period is completely dependent upon weather conditions. Fawn Township in southern York County has encountered May Fly hatches as early as the beginning of March during an early spring, while northern tier counties may not see a single ephemerid





until early June after experiencing an unusually long or severe winter.

Estimates of the total varieties of the May Fly species in the United States exceed 1800 different forms. These species range in size from the tiny *Baetis Vagans* or Olive Dun, whose ¾ inch length rates it among the smallest; to the giants, *Ephemera Guttalata* and *Ephemera Simulans,* the green and brown Drakes, respectively, who may measure in excess of one and one-half inches in length.

Once seen, the physical structure of the May Fly is not likely to be forgotten, a factor much appreciated by the fly tyer. The immediate impression is one of delicacy, both in structure and in coloration. Any species of May Fly may be characterized as: pastel hued, gracefully arched, lacey winged insect.

In the construction of the May Fly imitation, it is important to retain an extended cone-shaped body, tipped with not more than three tail fibers, and topped off with stiffly vertical wings and a sparse collar of hackle. The diameter of the hackle and the length of tail fibers should approximately equal the length of the hook shank, with the wing length just the slightest bit shorter. The overall appearance should give the impression of transluscence.

THE CADDIS FLY

As the season progresses, the angler should begin to see another insect appear. Its wings lie folded over its back and it sports a rather bedraggled tail assembly. Highly prized by the little squaretail, the brook trout, and almost as much vaunted by the great brown trout, these insects are the Caddis Flies, of the order *Trichoptera,* which compose the second most valuable food source for trout. The stomach contents of these fish will reveal collections of sand grains and bits of twigs. These strange remnants are the remains of the homes of Caddis Fly larvae and pupae, the juvenile forms of the newly appearing insect.

Highly susceptible to pollution or siltation, the Caddis Fly is found primarily in the clean, clear headwaters of swiftly flowing mountain streams, fellow residents with the brook trout, the little Char who also demands the cooler, fresher waters at the head of streams.

Known as the architect of the insect world, the Caddis larva begins to build its portable home almost immediately upon emerging from the egg. With saliva secretions, it will cement bits of mineral and vegetable matter into one of the long, tapering, remarkably sturdy tubes in which it will make its home for a period of six to eighteen months. Bracing the narrow end of the shelter between small stones or embedding it in the gravelly stream bottom, the larva

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HAPPINESS IS . . . FISHING?

by ***HELEN HIGHWATER***

THE OTHER DAY I met a woman who had some kind of chip on her shoulder about fishing. "Look here, Helen H.," she says, "I am getting fed up to my french twist with your stories about how all a woman has to do in order to

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HAPPINESS IS FISHING?

find complete marital bliss is to take along after her man when he goes fishing. You really don't expect me to believe all that, do you?"

"Have you ever tried it?" I asked . . . BEFORE answering her question.

"You are not very observant," she commented, pointing to the Field & Stream fishing badge on the lapel of her jacket. "This is for the big rainbow I took last year. I also have a Pennsylvania Fishing Citation for that one."

"I should have noticed," I apologized. "But if you're such a good fisherwoman how come the grouchy attitude over my articles?"

"Because of the way you have surrendered to the bullying of that Cave Man you talk about," she countered. "Also because you don't lay it on the line that if a woman goes fishing it should be because she likes it—enough to go alone, if necessary!"

Well, I liked the way her dark eyes flashed while she talked and I wanted to find out more about that Citation rainbow (especially WHERE she caught it). Furthermore, she was on the right track and the criticism was sound. I said:

"You might also have added that fishing is sometimes downright uncomfortable and I don't often point that out."

"Sure," she agreed, "like the time we are two miles from the car in freezing weather and I wade into a creek up to and beyond my two-way stretch—only to discover that the brute half of my marriage has given me the waders that leak."

"Sounds familiar," I nodded.

"Well, I can tell you," she continued, "in a situation like that a little of your milksop happiness goes a long way."

"Would you mind if I used that in my next article?" I asked.

"Oh, by all means do . . . but I won't tell you his name because in his position it might be embarrassing."

"Does he manufacture waders?" I asked, innocently.

"No," she confided, "he's one of those outdoor writers."

"Oh," I said. "You mean one of those writers who hasn't discovered it's more comfortable to bring the typewriter indoors?"

She ignored me. "Then there was the time he stripped the feathers off my new Easter hat BEFORE I had worn it to make some streamer flies."

"There should be a special punishment for that," I sympathized.

"There is," she said with a glance that made me know she meant it. "It's a steady diet of iced tongue and cold shoulder for a week—and he got it!"

"Tell me more—uh—you didn't tell me your name."

"Just call me Sylvia," she said.

"Well, tell me more, Sylvia. I'm on your side."

"I remember another time," she got a far-off look in her eyes, "when all the fishing equipment I got was old stuff of his that had worn out . . . like a canvas creel that I put four nice brown trout into one evening before I discovered they were sliding back into the creek through a big hole in the bottom. When I told him about it he gave me a blank look and said something about didn't I know how to sew."

"Dirty shame," I concurred.

"And fly lines," she went on. "By the time I got a fly line from him the gloss was worn off and it would sink faster than an anchor. It would be so full of holes that when you would retrieve it in a back cast it was like stepping into a shower . . . a cold one."

"You have had your troubles," I shook my head. "Where did all this happen?"

"O, that was in the old days when we lived in Potter County," she confided. "I get new fly lines now . . . my husband is so busy writing he doesn't get to go fishing much anymore and one of us has to keep up the image."

"Well, I am glad we have had this little chat," I told her. "Perhaps I haven't been quite honest with my reporting . . . only telling about the funny and humorous things . . . of course those are the incidents one remembers longest, you must admit."

"I understand," she said. "And sometimes the funniest incidents aren't humorous—or not AS humorous—to other people. Like the time a bunch of us were fishing Penn's Creek and we decided to take sandwiches and refreshments over to the stream with us. We divvied the solid food up among everyone but one person—Bill Walsh—and left him to bring the refreshments . . . not realizing that item came in four quart bottles. Well the picture of Bill clambering down a big hill and wading a stream so that if he fell it would be backwards . . . 'cause the bottles were in his wader pocket . . . was sure funny to me."

"But we were talking about the times fishing is just plain miserable . . . when the only reason you stay on the stream is because you've turned idiotic and like it," I reminded her.

"Like the time I waded so far into a fast, cold stream that the pressure of the water squeezed against me and the waders so hard that I could tell whether the dime in my hip pocket was heads or tails?"

"Yes, yes, that's the kind of stuff we should warn the women about," I said. "Of course, I think I could beat your story—once the water was so cold where I was wading that even the waders got goose bumps."

"Not bad," she commented. "However, I'm sure that the time I stood at the edge of a pond one summer evening will top that."

"Why," I wondered, "you weren't cold in the summer, were you?"

"No, but I stood there so long that a Great Blue Heron dropped down beside me, looked me in the eye and said 'grrrrrrrrkkkkkk!' so loud I jumped straight up for six feet."

"That means 'I love you' in heron talk," I told her. "He thought you were his mate standing there alone. Incidentally, where *was* your mate while this was going on?"

"Well, he was supposed to be fishing on the other side of a sand spit but I later found out he'd gone back to the car and gone to sleep. I was obeying his instructions not to move until he returned."

This had a familiar ring to it but I let it pass. It occurred to me that I hadn't pumped out of her the location at which she'd taken the prize rainbow.

"Incidentally, Sylvia," I tried to slide into the subject sideways, "you forgot to tell me whether you took that big rainbow on a wet fly or a dry fly . . . you know, the one you caught on the Yellow Breeches . . ."

"O, that was a wet Quill Gordon. I've found old reliable patterns to be the best . . . but it wasn't on the Yellow Breeches. Say, let me tell you about the time my husband ran a Number 6 Black Gnat in his ear while casting after dark with his back to the wind . . ."

"Y'say it wasn't the Yellow Breeches?" I interrupted.

"No," she said. "Well, my man has these awful big ears that stick out quite a bit and . . ."

"I'd have sworn you said it was the Yellow Br . . ." I cut in.

"Do you want to hear this story or not?" She was quite direct about it, so I smiled and nodded.

"Well, he is fishing a big, flat pool in Tionesta Creek. Before dark he has done everything according to Hoyle and has made experimental casts to determine how much line he should handle (telling me that you should work with shorter line after dark) even to the point of wrapping some thread around the line to indicate where he'd stop stripping.

"But AFTER dark you can hear big fish plopping around all over the place and he is sure they are all beyond his reach. 'I am going to cast farther out,' he tells me. 'Remember things are different after dark—you should work with less line,' I remind him. 'Phooey,' says he.

"Well, I backed away. I could hear line swishing and swooshing and whistling all over the place. When it sounded as though he was down to the backing there came a sudden, pain-filled Yeeooowww-ish kind of screech. Torn between my natural sympathy and my I-knew-it-would-happen attitude I didn't know whether to ask what was wrong or fill the air with laughter."

"Did he snag his ear before or after you caught the rainbow?" I was still fishing for that information.

"My but you ARE persistent," she gave me a stern look. "When we got him to the doctor's office—and the gent was also a fisherman it turned out—his only comment was (the doctor's that is) to the effect that with ears that big how come he has not caught one before now. He also wanted to know if my brute ever had any desire to wear earrings, like the pirates in the movies, and if so he would pierce the other ear for just a dollar-and-a-half more. Naturally, Jim declined."



"How interesting!" I said aloud. To myself I said . . . so his name is Jim . . . well that is something she didn't intend telling me and I will hold it over her to get the name of the stréam in which she took that big fish. This was very selfish of me and a moment later I felt ashamed of myself when she said:

"Why don't the two of us go fishing together sometime? We can go in my car and I'll be happy to show you the very pool in the very stream—Sugar Creek—where I took the monster. We can swap more yarns and get better acquainted."

"Great," I readily agreed. "How will we get together?"

"My phone number's on this," she handed me a card.

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BURNING PLEASURE BOAT above was the victim of a gasoline explosion (photo courtesy U.S. Coast Guard). Below Pennsylvania Fish Commission Watercraft Safety Officer Joseph Dick activates Commission explosion demonstration at the Philadelphia Boat Show. It takes only a couple of drops of gasoline to lift the tightly pressed lid of a quart can and a model boat several feet into the air.



A TINY DROP OF **DYNAMITE!**

by DEAN KLINGER
Chief Marine Services Specialist
PENNSYLVANIA FISH COMMISSION

EACH YEAR ABOUT THIS TIME the Federal Government releases its statistical figures on boating accidents and if the pattern holds true to its past course it will once again show that fire and explosion on board boats cause more property damage than any other single cause.

A numbers of years ago I read in a Federal publication that one cup of gasoline, mixed with the proper amount of air (the same stuff you breathe) and ignited by a spark, had the same explosive potential as 15 sticks of dynamite. This was not hard to believe for a person who had several years of marine accident investigation experience. The following case is a typical example of the dangers of this "Tiny Drop of Dynamite!"

On a warm summer day a few friends were going for a trial run on an inboard boat which they were considering purchasing. The permanent gas tank had just been filled at a service station while it was on a trailer. The boat was then launched and the motor was warmed up for about five minutes before it was shoved away from the dock with its passengers on board. The shifting mechanism was tight and the operator jerked the controls, possibly causing a spark in the bilges. As a result of the following explosion all occupants were thrown clear. One heavier than average was thrown about 35 feet and a young passenger was thrown even a greater distance. Fortunately nobody was killed but four people were hospitalized with burns and bruises. Needless to say there wasn't much left of the boat except what had been below the waterline—and a full tank of gasoline still intact.

If the gas tank was still full and intact what caused the gigantic explosion? Probably a few drops were spilled in the fueling process and not immediately wiped up. We could go on and on with examples like this.

Being impressed by the large explosion caused by a small amount of gasoline, I began spreading the word through lectures and boating courses about how potentially explosive gasoline is according to the government report. Without fail as soon as I stated about one cup of gasoline is equal to 15 sticks of dynamite the people would give me a blank stare as if I belonged in some kind of institution.

In order to make people realize the dangers of gasoline fumes I knew there must be some way to safely demonstrate using a small amount of gasoline that people could actually see. In the initial experiment about 10 drops of gasoline were put in a two gallon size can; the can had a regular automotive type spark plug soldered into the bottom of it. Power for the spark plug was furnished by a 6 volt battery and an old model T coil,—after allowing about 30 seconds for the gasoline to evaporate the ignition switch was activated from behind a safety wall, MAN what a lift off. The experimental blast convinced me that this was slightly beyond safety standards for use in public. So, back to what was left of the drawing board. The final explosion chamber as the result of many tests consists of a one quart size can using anywhere from 1 to 3 drops of gasoline at a time and ignited by a spark, furnished by a transformer, gapping across two wires. Not only does this cause quite an impressive explosion, but the explosion is always followed by a fire. This demonstration was shown to over one million people in the last five years at different shows, school, and meetings through the state. The expression it leaves on most people's faces is undescribable.

By using a little arithmetic a person will find that if one cup of gasoline has the same explosive potential as 15 sticks of dynamite then an ordinary 6 gallon tank would have the equivalent of 1440 sticks of TNT. With this thought in mind it should be easy to remember a few safety precautions. Here are some simple suggestions.

1. Remove all portable tanks from the boat before filling.
2. Never fill tanks completely (allow for expansion which occurs as gas warms up from sun rays.)
3. Make sure all permanent tanks are properly installed and have the vent overboard.
4. See that the filling hose is grounded to the tank to avoid static spark.
5. Wipe up all spilled gas immediately. More fires and explosions are caused by poor housekeeping on board than by faulty equipment.
6. On larger boats and inboards follow fueling instructions as given by dock attendant.
7. Have proper ventilation to all compartments where gas fumes could accumulate. Gas is heavier than air and will settle in the bilges of a boat and stay indefinitely unless removed.
8. Not much sense mentioning that pipe, cigar and cigarette while fueling—if we don't see you around next season we'll know you were dying for a smoke.



EXPLOSION ruined inboard/outboard pleasure boat on the Susquehanna and sent occupants flying through the air—and to the hospital!



1968 JUNIOR CITATION WINNERS

ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Jeffery Forbes, Ridgway. Age 11	15⅛ in., 1 lb., 5 oz. brook trout on a minnow	Ridgway Reservoir, Elk County
James Blasi, Mildred. Age 8	24½ in., 3½ lb. chain pickerel on a minnow	Lake John, Sullivan County
Harold Mullen, Sayre. Age 13	13½ in., 1¼ lb. yellow perch on a Swedish pimple	Lake Wesauking, Bradford County
Edward Orloski, Mountaintop. Age 10	26½ in., 4 lb., 9 oz. chain pickerel on a spoon	Glen Summit, Luzerne County
Alex Nepa, Carbondale. Age 12	24 in., 3½ lb. chain pickerel on a live bait	White Oak, Wayne County
Kathleen Bohensky, Dushore, Pa. Age 7	27½ in., 7¼ lb. walleye on a minnow	Susquehanna River, Bradford County
William E. Hardy, Royalton.	30 in., 20 lb. carp on a worm	Swatara Creek, Dauphin County
Kevin Loy, Palmyra. Age 15	31 in., 18¾ lb., carp on a worm	Swatara Creek, Lebanon County
Wayne Wendt, Shamokin Dam. Age 11	19 in., 1¾ lb. rainbow trout on a worm	Coburn, Centre County
Robert Rife, Middletown. Age 13	29 in., 4 lb. carp on a worm	Swatara Creek, Dauphin County
Richard D. Sipe, Royalton. Age 14	22 in., 4 lb. channel catfish on a worm	Swatara Creek, Dauphin County
Tracey Wojchehoski, Shamokin Dam. Age 11	34⅞ in., 23 lb., 2 oz. carp on a worm	Penns Creek, Snyder County
Robin L. Williams, W. Middlesex. Age 11	21 in., 3 lb., 9 oz. rainbow trout on a nightcrawler	Pine Run, Mercer County
Albert D. Crisamore, III, Marysville. Age 14	22 in., 4½ lb. channel catfish on a worm	Susquehanna River, Perry County
Charles Messenkopf, Erie. Age 13	23½ in., 4 lb. 11 oz. rainbow trout on nightcrawlers	Crooked Creek, Erie County
Craig Piurkoski, Ridgway. Age 14	20½ in., 3 lb. brook trout on a nightcrawler	Big Mill Creek, Elk County
Jeffery Wayne Kizer, Port Jervis, N.Y. Age 6	29 in., 7 lb. chain pickerel on a live bait	Duck Harbor, Wayne County
Sterling Metzgar, Stockertown. Age 12.	20 in., 4 lb. smallmouth bass on a sonic	Delaware River, Northampton County
Teresa Ann Pollicino, Mapleton Depot. Age 8	15½ in., 1½ lb. white crappie on a live minnow	Raystown Dam, Huntingdon County
William Martin, Glenshaw, Pa. Age 15	24¾ in., 5¾ lb. rainbow trout on ABU reflex	North Park Lake, Allegheny County
Daniel Myers, Huntingdon. Age 8	10½ in., 10 oz. rock bass on a Hellgramite lure	Raystown Branch, Huntingdon County
Eugene Etter, Erie. Age 14	12¾ in., 1 lb. yellow perch on a minnow	Presque Isle Bay, Erie County
James W. Schott, II, Galeton. Age 9	19¼ in., 3 lbs. brown trout on a Mepps #1	West Branch Pine Creek, Potter County
Ronald Sivonda, Allentown. Age 12	21½ in., 3 lb., 4 oz. brown trout on a nightcrawler	Little Bushkill Creek, Northampton County
Charles Gallo, Jr., New Market, N. J. Age 14	13⅜ in. yellow perch on a worm	Lake Wallenpaupack, Pike County
Richard D. Sipe, Royalton. Age 14	33 in., 22 lb. carp on a worm	Swatara Creek, Dauphin County
Joseph James Gibbs, Greenville. Age 7½	14 in., 1¾ lb. black crappie on a black gnat (wet fly)	Conneaut Lake, Crawford County
Steven Harrison, Titusville. Age 11	18½ in., 2½ lb. brown trout on a nightcrawler	Pine Creek, Crawford County
Glenn Bernard Keckler, Harrisburg. Age 15	20 in., 5 lb. brown trout on calf liver	Lisburn, Dauphin County
Bobby Finnecy, Edinboro. Age 10	14 in., 1¼ lb. crappie (black) on a nightcrawler	Edinboro Lake, Erie County
Layne E. Cober, Bedford. Age 12	14 in. fallfish on a nightcrawler	Raystown Branch, Bedford County
Wayne Gene Hollen, Altoona. Age 10	14 in. black crappie on a live minnow	Stephens Dam, Blair County
Marlene Elizabeth Diehl, Tyrone. Age 9	14¼ in. black crappie on a live minnow	Stephens Dam, Blair County
Scott Pearson, Edinboro. Age 12	15½ in., 2½ lb. black crappie on a nightcrawler	Edinboro Lake, Erie County
Philip R. Brown, Harrisburg. Age 6	11¼ in., 1 lb., 2 oz. bluegill on a salmon egg	Swatara Creek, Dauphin County
Scott David Keeler, Mechanicsburg. Age 5	11 in., 1 lb. rock bass on a nightcrawler	Susquehanna River, York County
James Hans, Easton. Age 15	22½ in., 3¾ lb. American shad on a shad dart	Delaware River, Northampton County
Philip Thornton, Fairless Hills. Age 15	23 in., 4¾ lb. brown trout on a daredevil	Log Tavern Lake, Pike County
Richard H. Taylor, Petersburg. Age 11	14 in., 1 lb. white crappie on a cut bait	Raystown Dam, Huntingdon County
Daniel Myers, Huntingdon. Age 7	14¼ in., 1¼ lb. white crappie on a minnow	Raystown Dam, Huntingdon County
Ronald Yurcic, Allentown. Age 15	18¾ in., 3 lb. brown trout on a worm	Little Lehigh, Lehigh County
Parke Brown, Lewistown. Age 15	10½ in., 1 lb., 2 oz. rock bass on a worm	Juniata River, Mifflin County
Rocky Baggiossi, Sharpsville. Age 15	22 in., 4 lb. channel catfish on a nightcrawler	Shenango River, Mercer County

ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Ed. Gavalla, Milford. Age 14	23 in., 5 lb. brown trout on a flat fish	Log Tavern Lake, Pike County
Donald Dreisbach, Tamaqua. Age 6	21 in., 4 lb. brown trout on a worm	Beaver Creek, Schuylkill County
David Kenyon, Mansfield. Age 9	13½ in., 2 lb. yellow perch on a worm	Mill Creek, Tioga County
Ed. Abrams, Holmes. Age 13	14 in., 2 lb. bullhead catfish on a nightcrawler	Ridley Lake, Delaware County
Bruce Nicholson, Dravosburg. Age 15	14⅛ in., ½ lb. bullhead catfish on a worm	Monongahela River, Allegheny County
Charles Q. Morrison, Lancaster. Age 14	21 in., 3¼ lb. American shad on a shad dart	Delaware River, Pike County
Martin Conmy, Camp Hill. Age 12	21 in., 3¼ lb. American shad on a shad dart	Lackawaxen River, Pike County
David Stampler, Shiremanstown. Age 12	21 in., 3 lb. American shad on a shad dart	Lackawaxen River, Pike County
Carl Allen, Sharpsville. Age 11½	43½ in., 25½ lb. muskellunge on a nightcrawler	Pymatuning Lake, Crawford County
Douglas Carl Nichols, Lewistown. Age 9	11⅛ in., 1 lb. rock bass on a black streamer	Lost Creek, Juniata County
Joseph Bowers, Ridgway, Pa. Age 15	18½ in., 1 lb., 14 oz. rainbow trout on a nightcrawler	Ridgway Reservoir, Elk County
Randy Shiley, Lykens, Pa. Age 14	19 in., 3½ lb. brown trout on a minnow	Rattling Creek, Dauphin County
Dwight Romberger, Allentown. Age 13	21½ in., 3½ lb. American shad on a shad dart	Delaware River, Pike County
Jeffrey Marzella, Ridgway. Age 12	18½ in., 3 lb. rainbow trout on a salmon egg	Ridgway Reservoir, Elk County
Jeff Underkoffler, Williamstown. Age 7	21 in., 3½ lb. rainbow trout on a salmon egg	Clarks Creek, Dauphin County
Robert Barker, Havertown. Age 12	24 in., 4 lb., 7 oz. rainbow trout on a nightcrawler	Octoraro Creek, Chester County
Daryl E. White, Indian Head. Age 9	20½ in., 4 lb. rainbow trout on a worm	Indian Creek, Fayette County
Mark Castel, Portage, Pa. Age 11	15½ in., 1 lb.. 8½ oz. brook trout on a worm	Bobs Creek, Blair County
Harry Koons, Sunbury, Pa. Age 15	10 in., 10 oz. rock bass on a little river runt	Susquehanna River, Northumberland County
Joseph Cicali, Philadelphia, Pa. Age 15	23 in., 2 lb., 10 oz. chain pickerel on a minnow	Torresdale Hatchery Pond, Philadelphia County
Scott Bubar, W. Brownsville. Age 9	33 in., 20 lb. carp on a nightcrawler	Confluence Dam, Somerset County
Gary Younkin, Linden, Pa. Age 13	13 in., 15 oz. yellow perch on a worm	Susquehanna River, Lycoming County
Richard Bowersox, Sunbury, Pa. Age 10	10¼ in., 12 oz. rock bass on a worm	Susquehanna River, Northumberland County
Randy Bowersox, Sunbury, Pa.	10 1/16 in., 10 oz. rock bass on a worm	Susquehanna River, Northumberland County
Michael Rzonsa, Reading, Pa. Age 11	30 in., 12½ lb. carp on a mush	Susquehanna River, York County
George Stahler, Shiremanstown, Pa.	19 in., 2 lb. rainbow trout on a worm	William Grove, Cumberland County
James Kulavich, Waymart, Pa. Age 14	13½ in., 1 lb., 8 oz. yellow perch on a nightcrawler	Duck Harbor Pond, Wayne County
Charles A. Grove, Shirleysburg, Pa. Age 9	20 in., 3 lb. brown trout on a nightcrawler	Fort Shirley Run, Huntingdon County
Pat Reilly, Wormleysburg, Pa. Age 15	28 in., 17 lb. carp on corn	Susquehanna River, Dauphin County
Frederick Williams, Allentown, Pa. Age 13	21¼ in., 4¾ lb. brown trout on a nightcrawler	Lake Wallenpaupack, Pike County
Pat Reilly, Wormleysburg, Pa. Age 15	34 in., 24 lb. carp on corn	Susquehanna River, Dauphin County
Robert MacDowell, Johnstown, Pa. Age 13	17¾ in., 2 lb. fallfish on cheese	Stevenson Dam, Potter County
Kurt M. Matter, Millersburg, Pa. Age 8	31 in., 3 lb., 6 oz. eel on a nightcrawler	Susquehanna River, Dauphin County
Roy L. Maurer, Dalmatia, Pa. Age 10	20¼ in., 3 lb., 8½ oz. rainbow trout on a minnow	Clarks Creek, Dauphin County
Joseph Stabryla, Pittsburgh, Pa. Age 13	20 in., 4½ lb. brown trout on a nightcrawler	North Park, Allegheny County
Robert Haggerty, Cairnbrook, Pa. Age 12	26½ in., 5 lb. northern pike on a daredevil	Shawnee Dam, Bedford County
Robert MacDowell, Johnstown, Pa. Age 13	18¼ in., 2½ lb. fallfish on cheese	Stevenson Dam, Potter County
Robert MacDowell, Johnstown, Pa. Age 13	18¾ in., 2¾ lb. fallfish on cheese	Stevenson Dam, Potter County
Denise Davis, Greenville, Pa. Age 10	15¾ in., 2 lb., 1 oz. bullhead on a minnow	Pymatuning Lake, Crawford County
Thomas R. Hensel, Shoemakersville, Pa. Age 5	27 in., 4¼ lb. chain pickerel on a shiner	Hopewell Lake, Berks County
Patrick Spegar, Peckville, Pa.	15¼ in., 2 lh. bullhead on a nightcrawler	Chapman Lake, Lackawanna County
Margaret L. Neiderer, Hanover, Pa. Age 8	11½ in., 1¾ lb. bluegill on a nightcrawler	Farm Pond, York County

ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Richard Yeager, Sunbury, Pa. Age 9	11½ in., 13 oz. rock bass on a worm	Susquehanna River, Northumberland County
Louis Domiano, Scranton, Pa.	25 in., 6½ lb. bullhead on a nightcrawler	Lake Henry, Lackawanna County
Dennis Hill, Johnstown, Pa. Age 11	15½ in., 2 lb. bullhead on a worm	Brown's Pond, Cambria County
Jeffrey Ferry, Somerset, Pa. Age 15	31 in., 7½ lb. muskellunge on a minnow	Hi-Point Lake, Somerset County
Valerie Goss, Huntingdon, Pa. Age 6	36 in., 11¾ lb. muskellunge on a minnow	Raystown Dam, Huntingdon County
Bonnie Alyce Angst, Lansford, Pa. Age 12	38 in., 11 lb., 5 oz. muskellunge on a rapala plug	Lake Jean, Luzerne County
Michael Giangrieco, Hallstead, Pa. Age 15	29 in., 10½ lb. carp on a nightcrawler	Susquehanna River, Susquehanna County
Joseph B. Davis, Patton, Pa. Age 15	16½ in., 2¼ lb. brook trout on a minnow	Killbuck Run, Cambria County
Steven L. Beard, Manns Choice, Pa. Age 10	14½ in., 1¼ lb. crappie on a worm	Shawnee Lake, Bedford County
Bruce Matish, Dysart, Pa. Age 10	19⅛ in., 2½ lb. rainbow trout on a worm	Dysart Sportsmen Dam, Cambria County
Rosie Gionfriddo, Dysart, Pa. Age 9	18 in., 1¾ lb. rainbow trout on a worm	Dysart Sportsmen Dam, Cambria County
Paul Guman, Jr., Olyphant, Pa. Age 10	23½ in., 3 lb. chain pickerel on a C. P. swing silver	Spangenburg, Lackawanna County
Stephen Earl Nederostek, Catasaqua, Pa. Age 8	21 in., 3 1-2 lb. rainbow trout on a worm	Little Lehigh River, Lehigh County
Parke Brown, Lewistown, Pa. Age 15	21¾ in., 3 lb. brown trout on a worm	McClure Dam, Centre County
Milton Sellers, Lewistown. Age 15	30½ in., 2½ lb. eel on a worm	Juniata River, Mifflin County
Joseph Kandl, Easton, Pa. Age 10	18 in., 3 lb. smallmouth bass on a worm	Delaware River, Northampton County
Charles L. Smith, Sinden, Pa. Age 10	12⅜ in., 11 oz. yellow perch on a nightcrawler	Susquehanna River, Lycoming County
William C. Dissinger, Duncannon, Pa. Age 14	10¼ in., ¾ lb. rock bass on a nightcrawler	Susquehanna River, Perry County
David Slick, New Florence, Pa. Age 12	19½ in., 2 lb., 5 oz. brown trout on a nightcrawler	Powder Mill Run, Westmoreland County
John Locke, Uniontown, Pa. Age 15	26¼ in., 4 lb., 8 oz. northern pike on a minnow (golden shiner)	High Point Lake, Somerset County
Mathew Treese, Sunbury, Pa. Age 11	25⅛ in., 3 lb., 5 oz. walleye on a worm	Susquehanna River, Northumberland County
Larry Bidelspach, Sunbury, Pa. Age 8	10 in., 9 oz. rock bass on a worm	Susquehanna River, Northumberland County
Dana Wilt, Sunbury, Pa. Age 9	10 in., 11 oz. rock bass on a worm	Susquehanna River, Northumberland County
Ronnie Arnold, Millersburg, Pa. Age 11	31 in., 17 lb., 14 oz. carp on a worm	Susquehanna River, Dauphin County
John Bigler, Bentleyville, Pa. Age 7	22 in., 5½ lb. rainbow trout on a gold mepps	Dutch Fork Lake, Washington County
William D. Smart, Jr., Bessmer, Pa. Age 12	19 in., 2 lb., 9 oz. rainbow trout on a salmon egg	Woodcock Creek, Crawford County
William F. Humberson, Hopewood, Pa. Age 15	22½ in., 6 lb. largemouth bass on a nightcrawler	Youghiogheny Reservoir, Fayette County
Scott L. Lentz, Magungie, Pa. Age 9	12½ in., 1 lb. yellow perch on a worm	Lake Wallenpaupack, Pike County
Tim Drake, Pleasantville, Pa. Age 11	30¾ in., 6 lb. muskellunge on a minnow	Allegheny River, Forest County
Scott Saeger, Red Hill, Pa.	18¼ in., 2 lb., 14 oz. largemouth bass on a rapala plug	Church Pond, Montgomery County
Michael Mohr, Washington, Pa. Age 14	13¾ in., 1⅛ lb. yellow perch on a red-white daredevil	Kelley Inds. Dam, Washington County
Randy Mowry, Lewistown, Pa. Age 13	25 in., 8½ lb. channel catfish on a worm	Juniata River, Mifflin County
Jeffrey Creighton, Lewistown, Pa. Age 11	10 in., ¾ lb. rock bass on a worm	Juniata River, Mifflin County
Wayne Baker, Patton, Pa. Age 12	21½ in., 4 lb. channel catfish on a smelt	Glendale Dam, Cambria County
Donald Lee Enterline, Washington Boro, Pa. Age 13	26½ in., 5 lb. walleye on a live minnow	Susquehanna River, Lancaster County
Todd J. Steele, New Holland, Pa. Age 13	32 in., 19 lb., 6 oz. carp on a worm	Juniata River, Juniata County
Donald Houseknecht, Jr., Luzerne, Pa. Age 13	23 in., 7 lb., 6 oz., largemouth bass on a rapala	Collyers Lake, Susquehanna County
Frank Horvath, Lansford, Pa. Age 12	17 in., 2 lb., 2 oz., brook trout on a nightcrawler	Little Bear Creek, Carbon County
Daniel A. Coover, Shippensburg, Pa. Age 14	23 in., 5 lb., 5 oz. rainbow trout on a worm	Middle Spring Creek, Cumberland County
Francis Masiewicz, Scranton, Pa. Age 15	15 in., 2½ lb. bullhead on a nightcrawler	Panther Lake, Wayne County
David Hanisek, Lake City, Pa.	27¾ in., 7 lb., 12 oz. rainbow trout on a nightcrawler	Elk Creek, Erie County
Robert MacDowell, Johnstown, Pa. Age 13	15 in., 1 lb. yellow perch on a nightcrawler	Lake Somerset, Somerset County

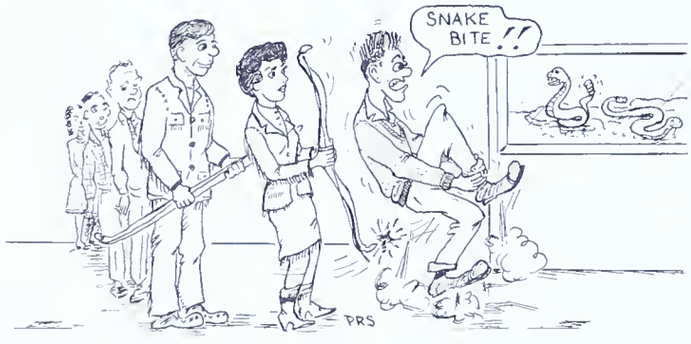
ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Nathan Montanye, Houghton, N. Y. Age 9	14¾ in., 1¾ lb. bullhead on a nightcrawler	Hills Creek Lake, Tioga County
Gregory Roman, Harrisburg, Pa. Age 11	19 in., 3½ lb. smallmouth bass on a rebel	Susquehanna River, Dauphin County
Matthew Youkonis, Allentown, Pa. Age 14	10½ in., 1 lb., 4 oz. bluegill on a worm	Lake Wallenpaupack, Pike County
Marke Longenecker, Annville, Pa. Age 12	19¼ in., 3 lb., 12 oz. smallmouth bass on a plug	Susquehanna River, Dauphin County
Robert Schmidt, Bethlehem, Pa. Age 12	19 in., 3 lb. rainbow trout on a worm	Jordan Creek, Lehigh County
Christian E. Porter. Franklin, Pa. Age 14	20 in., 3 lb., 4 oz. brown trout on a nightcrawler	Two Mile Run, Venango County
Richard Baron, Lancaster, Pa. Age 13	27½ in., 8 lb., 5 oz. carp on a worm	Conestoga Creek, Lancaster County
Cliff Forsythe, Lewistown, Pa. Age 14	10½ in., ⅞ lb. rock bass on an artificial hellgramite	Juniata River, Mifflin County
Nevin Brungard, Northumberland, Pa. Age 13	20¼ in., 3 lb., 3 oz. channel catfish on a minnow	Susquehanna River, Northumberland County
John Locke, Uniontown, Pa. Age 15	18½ in., 3 lb., 8 oz. smallmouth bass on a golden shiner	Yough Dam, Somerset County
John Locke, Uniontown, Pa. Age 15	25¼ in., 3 lb., 12 oz. northern pike on a golden shiner	High Point Lake, Somerset County
Ronald Richard Robinson, Waymart, Pa. Age 13	19 in., 4 lb. largemouth bass on a nightcrawler	Long Pond, Wayne County
Tad Zieba, Houston, Pa. Age 14	21½ in., 3 lb., 5 oz. brown trout on salmon eggs	Dutch Fork Creek, Washington County
William T. Tate, Williamsburg, Pa. Age 9	24 in.. 5 lb. walleye on a rebel	Juniata River, Huntingdon County
Lewis G. Price, Salix, Pa. Age 11	20 in., 5 lb., 6 oz. largemouth bass on a red worm	Dunnie Creek, Bedford County
Arthur Lyle Speck, Huntingdon, Pa. Age 6	24 in., 4½ lb. walleye on a nightcrawler	Raystown Dam, Huntingdon County
Daniel Altif, Allentown, Pa. Age 15	28½ in., 12¾ lb. carp on a nightcrawler	Portland, Northampton County
Barry Corkle, Highspire, Pa. Age 15	34 in., 11 lb. muskellunge on a minnow plug	Hill Island-Susquehanna Res., Dauphin County
Donald L. Bartley, Clearfield, Pa. Age 14	22 in., 3¾ lb. walleye on a spoon	Glendale Dam, Cambria County
Brian L. Cain, Williamsport, Pa.	19 in., 4 lb. brown trout on a nightcrawler	Elk Creek, Sullivan County
Mark Zawada, Glenmoore, Pa. Age 6	12¾ in., 2 lb., 3 oz. bluegill on a worm	Valhalla Pond, Chester County
Kurt Schenkemeyer, Johnstown, Pa. Age 4½	15½ in., 1½ lb. bullhead on a worm	Raystown Dam, Huntingdon County
Kris Miller, Polk, Pa. Age 15	28 in., 9 lb., 12 oz. brown trout on a streamer	Little Sandy Creek, Venango County
Gregory Churach, Potstown, Pa. Age 10	24¾ in., 4 lb., 2 oz. chain pickerel on pear minnow lure	Promised Land Lake, Pike County
Scott A. Sorrick, Robesonia, Pa. Age 15	15½ in., 1 lb., 4 oz. brook trout on a worm on spinner	Furnace Creek, Berks County
Don Lantzy, Spangler, Pa. Age 13	20½ in., 3 lb. rainbow trout on a redworm	Blacklick Creek, Cambria County
Richard E. Rapp, Telford, Pa.	15¼ in., 1¾ lb. brook trout on a worm	Little Lehigh Creek, Lehigh County
Harry Zinn, York, Pa. Age 14	21½ in., 5½ lb. channel catfish on a nightcrawler	York Water Co. Dam., York County
Richard Taylor, Petersburg, Pa. Age 11	14 in., 1 lb. fallfish on a worm	Shavers Creek, Huntingdon County
Robert Flynn, Philadelphia, Pa. Age 14	18 in., 3¼ lb. largemouth bass on a jitterbug	Torresdale Hatchery Pond, Philadelphia County
Mark Duncan, Farmington, Pa. Age 15	19¼ in., 3½ lb. largemouth bass on a jitterbug	Stone Valley, Huntingdon County
Larry Super, Coopersburg, Pa. Age 15	10¼ in., 1 lb. bluegill on a worm	Lake Wallenpaupack, Pike County
Dwight Romberger, Allentown, Pa. Age 14	19½ in., 3 lb. rainbow trout on a june bug spinner & red worm	Lake Wallenpaupack, Wayne County
Mark Oristaglio, Broomall, Pa. Age 14	18½ in., 3 lb. largemouth bass on a plastic worm	Springton Reservoir, Delaware County
Bradley Baxter, Hummelstown, Pa. Age 13	27 in., 7¾ lb. carp on a mulberry	Swatara Creek, Dauphin County
Donald W. Weir, Huntingdon, Pa. Age 14	21½ in., 3¼ lb. rainbow trout on a worm	Whipple's Dam, Huntingdon County
David M. Mulfinger, Pleasant Gap, Pa. Age 12	22 in., 4 lb. brown trout on a worm	Logan Branch, Centre County
Alton B. Eckert, Monongahela, Pa. Age 14	18¼ in., 2½ lb. smallmouth bass on a rebel lure	Susquehanna River, Union County
Gordon W. Strauss, Jr., Jonestown, Pa.	19 in., 4 lb. largemouth bass on a rubber worm	Shueys Lake, Lebanon County
James Wagner, Fallen Timber, Pa. Age 9	24 in., 6 lb. channel catfish on a smelt	Glendale Dam, Cambria County

ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Dorothy Himes, Folcroft, Pa. Age 9	18 in., 3½ lb. largemouth bass on a nightcrawler	Brandwine Creek, Chester County
Mark Witmer, Biglerville, Pa. Age 12	10 in., ½ lb. rock bass on a crazy crawler	Juniata River, Juniata County
Tom Rowan, Brookville, Pa. Age 15	23 in., 4 lb. brown trout on a crayfish	North Fork, Jefferson County
Ed Michura, Jr., Conemaugh, Pa. Age 15	18½ in., 2 lb., 1 oz. brown trout on a black ghost	North Fork Creek, Jefferson County
Robert J. Van Ryn, Irwin, Pa. Age 12	15 in., 2 lb. brook trout on a nightcrawler	Mountain Valley Lake, Westmoreland County
Jay Gable, Lebanon, Pa. Age 14	20¼ in., 3½ lb. largemouth bass on a nightcrawler	Memorial Lake, Lebanon County
Jim Edmiston, Lewistown, Pa. Age 14	26 in., 9¼ lb. carp on a dough ball	Juniata River, Mifflin County
Scott Edmiston, Lewistown, Pa. Age 10	25 in., 7¼ lb. carp on a dough ball	Juniata River, Mifflin County
Edward L. Pearson, Jr. Moscow, Pa. Age 11	10½ in., 1 lb. rock bass on a minnow	Gouldsboro Lake, Lackawanna County
David G. Stall, Jr. Oaks, Pa. Age 15	18 7/16 in., 3¼ lb. smallmouth bass on a jitterbug	Perkiomen Creek, Montgomery County
Harry E. Lesher, II, Selinsgrove, Pa. Age 11	20¾ in., 4 lb. rainbow trout on a worm	Allenwood Prison Farm Pond, Union County
Scott Seaman, Selinsgrove, Pa. Age 10	10 in., 1 lb., 5 oz. rock bass on a plug	Penns Creek, Snyder County
Scott Wissinger, Selinsgrove, Pa. Age 14	10½ in., 12 oz. rock bass on a worm	Susquehanna River, Northumberland County
Scott Wissinger, Selinsgrove, Pa. Age 14	10⅜ in., 14 oz. rock bass on a worm	Susquehanna River, Northumberland County
Robert J. Demmien, Jr., Williamsport, Pa. Age 11	19½ in., 2¾ lb. smallmouth bass on a crayfish	Lycoming Creek, Lycoming County
Donald Fleagle, Fannettsburg, Pa.	20 in., 3½ lb. brown trout on a worm	Conococheague Creek, Franklin County
Ronald Long, Allentown, Pa. Age 15	12¼ in., 1 lb. yellow perch on a water worm	Lake Wallenpaupack, Pike County
Sheila Bentz, Annville, Pa. Age 7	19 in., 3½ lb. largemouth bass on a sputter bug	Memorial Lake, Lebanon County
Charles R. Holbein, Jr., Butler, Pa. Age 15	19¼ in., 3¾ lb. smallmouth bass on a soft shell crab	Allegheny River, Armstrong County
Edward Ruda, Jr., Carlisle, Pa. Age 13	20½ in., 5 lb., 1 oz. brown trout on a worm	Yellow Breeches, Cumberland County
Randy Weller, Colebrook, Pa. Age 11	18¼ in. smallmouth bass on a plug	Susquehanna River, Dauphin County
Michael Wilczewski, Dickson City, Pa. Age 11	10½ in., 14 oz. bluegill on a worm	Long Pond, Wayne County
William H. Way, Mt. Joy, Pa. Age 13	25¼ in., 6¼ lb. carp on a dough ball	Safe Harbor Pond, Lancaster County
Larry Echard, Mt. Pleasant, Pa. Age 15	23¼ in., 4¼ lb. walleye on a rapala	Lake Somerset, Somerset County
Edward Coberly, Monaca, Pa. Age 13	27 in., 8 lb. carp on a cicada	Green Valley Spts. Pond, Beaver County
Alton Eckert, Monongahela, Pa. Age 14	25½ in., 8 lb., 4 oz. carp on corn	Pigeon Creek, Washington County
Terry Witmer, New Berlin, Pa. Age 12	22 in., 3 lb., 2 oz. brown trout on a worm	Spring Creek, Centre County
John M. Fernandoz, New Castle, Pa. Age 9	10¼ in., 10 oz. rock bass on a nightcrawler	Bessemer Rod & Gun Club, Lawrence County
Kenny Sublinsky, New Kensington, Pa. Age 15	19 in., 3 lb., 10 oz. smallmouth bass on a minnow	Allegheny River, Armstrong County
Dean J. Wainer, New Kensington, Pa. Age 15	18¼ in., 2 lb. brown trout on a worm	North Fork, Forest County
Patti A. Stoner, Newton Hamilton, Pa. Age 10	31 in., 15 lb., 8 oz. carp on a soft crab	Juniata River, Mifflin County
Paul Bannon, Philadelphia, Pa. Age 14	18 in., 3 lb. largemouth bass on a worm	Torresdale Children's Pond, Philadelphia County
David Adams, Sunbury, Pa. Age 14	18¼ in., 4 lb., 5 oz. largemouth bass on a nightcrawler	Dug Out Pond, Northumberland County
Patti A. Stoner, Newton Hamilton, Pa. Age 10	30½ in., 15 lb. carp on a soft crab	Juniata River, Mifflin County
Steven Cutrze, Erie, Pa. Age 12	24 in., 5½ lb. largemouth bass on a golden rapala	Presque Isle Bay, Erie County
Stephen Bruce Dixon, Levittown Pa. Age 12	17½ in., 3 lb. brook trout on a minnow	Shohola Creek, Wayne County
John W. Carney, Hawley, Pa. Age 13	15½ in., 1 lb., 9 oz. black crappie on a bass bug	Lake Wallenpaupack, Wayne County
Fritz Curtze, Erie, Pa. Age 15	31 in., 7 lb. muskellunge on a creek chub	Edinboro Lake, Erie County
Charles D. Leiter, Jr. Mifflintown, Pa. Age 15	18 in., 2 lb., 4 oz. smallmouth bass on a tiny torpedo	Juniata River, Juniata County
Brian Crawford Rich, Philadelphia, Pa. Age 3	19 in., 4 lb., 6 oz. largemouth bass on a nightcrawler	Lake Harmony, Carbon County

ANGLER'S NAME AGE & HOMETOWN	SIZE, SPECIES & BAIT USED	WATER AREA & COUNTY
Mark Workinger, York, Pa. Age 14	18½ in., 3 lb. largemouth bass on an ABU-reflex	York Pond, York County
Michael Casbeer, Elkland, Pa. Age 10	26 in., 5¼ lb. walleye on a nightcrawler	Hills Creek, Tioga County
Archie Campfield, Hawley, Pa. Age 11	19 in., 2½ lb. rainbow trout on a Thomas Buoyant	Lake Wallenpaupack, Pike County
Thomas E. Andrew, Bethlehem, Pa. Age 10	14¼ in., 1 lb., 4 oz. brook trout on a salmon egg	Monocacy Creek, Northampton County
James Martin, Dallas, Pa. Age 13	16 in., 2 lb. 3 oz. bullhead catfish on a red worm	Cooks Pond, Wyoming County
Richard Forsythe, McKeesport, Pa. Age 14	26⅞ in., 7 lb. walleye on a gold spoon	Allegheny River, Warren County
Clifford Fullom, Camp Hill, Pa. Age 10	26 in., 7¼ lb. channel catfish on a rapala lure	Susquehanna River, Dauphin County
Jay Gensemer, Reading, Pa. Age 15	15 in. crappie on a plastic minnow	Ontelaunee Dam, Berks County
Caroline Burkett, Glendale, Pa.	23 in., 5½ lb. brown trout on a nightcrawler	Cove Creek, Bedford County
Joel W. Hockensmith, Newville, Pa. Age 13	21 in., 4 lb. brown trout on a worm	Big Spring Creek, Cumberland County
William H. Stum, Newville, Pa. Age 13	18 in., 2 lb. rainbow trout on a grasshopper	Big Spring Creek, Cumberland County
John R. McKeehan, Newville, Pa. Age 14	22½ in., 5½ lb brown trout on cheese	Big Spring Creek, Cumberland County
Chip Smith, Sharon, Pa. Age 8	26 in., 4 lb. northern pike on a black sucker	Shenango River, Mercer County
Todd J. Steel, New Holland, Pa. Age 13	20½ in., 3 lb. 10 oz. channel catfish on a crab	Juniata River, Juniata County
Gerald Anastasia, New Castle, Pa. Age 12	20 in., 3 lb. 6½ oz. smallmouth bass on a creek chub	Conneaut Lake, Crawford County
Bill Chapla, Old Forge, Pa.	12½ in., 13 oz. yellow perch on a live minnow	Duck Harbor Pond, Wayne County
Jeff Borich, Sunbury, Pa. Age 15	10⅛ in., 10 oz. rock bass on a worm	Susquehanna River, Northumberland County
Kevin J. Smith, Connellsville, Pa.	31 in., 7¼ lb. northern pike on a minnow	High Point Lake, Fayette County
Danny Kerstetter, Shamokin Dam, Pa. Age 14	11¼ in., 15 oz. rock bass on a worm	Susquehanna River, Northumberland County
Daniel Concar, Pittsburgh, Pa. Age 13	32½ in., 16 lb. 4 oz. catfish on a chub	Allegheny River, Venango County
Thomas Bonacci, Carbondale, Pa. Age 11	26 in., 5 lb. chain pickerel on a live bait	Keen's Pond, Lackawanna County
William Veronesi, Wayne, Pa. Age 10	16 in., 1½ lb. black crappie on a C. P. swing	Lake Mokoma, Sullivan County
Jeff Shipman, Mechanicsburg, Pa. Age 10	25½ in., 8 lb. carp on a crab	Susquehanna River, Cumberland County
John Lawrence Rozik, Belle Vernon, Pa. Age 5	23½ in., 3 lb. 9 oz. walleye on a shiner	Yough Dam, Somerset County
Kurt Sleighter, Camp Hill, Pa. Age 14	14¼ in., 1⅞ lb. bullhead on worms	Pinchot State Park, York County
Francis Masiewicz, Scranton, Pa. Age 15	31½ in., 2¾ lb. eel on a nightcrawler	Panther Lake, Wayne County
Kathy Kozora, Verona, Pa. Age 13	22 in., 3 lb. walleye on a red-white spoon	Allegheny River, Warren County
John Chapman, 111, Oliphant Furnace, Pa. Age 11	29 in., 7½ lb. walleye on a beno	Yough Dam, Fayette County
Martin Avery, Tionesta, Pa. Age 12	18½ in. smallmouth bass on a nightcrawler	Allegheny River, Forest County
Kenneth Hilbert, Allentown, Pa. Age 15	20½ in., 2 lb. 4 oz. brown trout on a nightcrawler	Jordan Creek, Lehigh County
Scot Williamson, Camp Hill, Pa. Age 11	10½ in. rock bass on a minnow	Yellow Breeches, Cumberland County
Lisa Foust, Windber, Pa. Age 6	25 in., 4 lb. walleye on a minnow	Shawnee Lake, Bedford County
Raymond Combine, Sharpsville, Pa. Age 14	27 in., 4 lb. northern pike on a brass spoon	Shenango River, Mercer County
Gordon Williams, Levittown, Pa. Age 12	25 in., 5½ lb. walleye on a worm	Manor Lake, Bucks County
George J. Konowal, Philadelphia, Pa. Age 14	18 in. brown trout on a deer hair fly	Fisherman's Paradise, Centre County
Jeffrey C. Rich, Philadelphia, Pa. Age 13	22 in. brown trout on a white miller	Fisherman's Paradise, Centre County
Paul Haertel, Clifton, N. J. Age 13	24 in., 3 lb. 11 oz. chain pickerel on a Thomas dolly	Delaware River, Pike County
Judy Lin Baumbaugh, Greencastle, Pa. Age 5	31 in., 17 lb. carp on a worm	Conococheague Creek, Franklin County
Thomas D. Diskevich, Jr., Penn Hills, Pa. Age 10	25 in., 6½ lb. bullhead catfish on a minnow	Allegheny River, Armstrong County
Thomas D. Diskevich, Jr., Penn Hills, Pa. Age 10	16 in., 1 lb. bullhead catfish on a minnow	Allegheny River, Armstrong County
David DeMarco, Berwick, Pa. Age 11	28½ in., 9½ lb. carp on a dough ball	Susquehanna River, Columbia County
David R. Loaffler, Levittown, Pa. Age 7	19 in., 3 lb. largemouth bass on a nightcrawler	Promised Land Lake, Pike County
Mike Shayuth, Jr., Sharon, Pa. Age 13	28½ in., 5 lb. northern pike on a black sucker	Shenango Dam, Mercer County
Charles Chabal, III, Tarentum, Pa. Age 13	36 in., 24 lb. channel catfish on a sucker	Allegheny River, Armstrong County
Robert DeMent, Berwick, Pa. Age 11	24 in., 6½ lb. channel catfish on a dough ball	Susquehanna River, Columbia County
Gregory Adams, Pittsburgh 4, Pa.	27¼ in., 8 lb. 2 oz. carp on a dough ball	Ohio River, Allegheny County
Daniel Sweigart, Chadds Ford, Pa. Age 11	18¾ in., 2 lb. 2 oz. brown trout on a worm	Cedar Run, Lycoming County
Ralph Sekeres, Connellsville, Pa. Age 10	20½ in., 4½ lb. smallmouth bass on a worm	Yough Dam, Somerset County
Robert Moore, Pittsburgh, Pa. Age 11	14 in., 1¾ lb. bullhead on a nightcrawler	Lake Onedia, Butler County
Jimmy Brandt, Mechanicsburg, Pa. Age 13	20½ in., 3½ lb. bullhead on a worm	Pond, Cumberland County
John W. Chapman, III, Oliphant Furnace, Pa. Age 11	26 in., 5½ lb. walleye on a beno	Yough Dam, Fayette County
Bill Chapla, Old Forge, Pa.	13½ in., 1 lb. yellow perch on a minnow	Duck Harbor Pond, Wayne County
Randy Weller, Colebrook, Pa. Age 11	10½ in. rock bass on a plug	Susquehanna River, Dauphin County
Gary Goulbieski, Erie, Pa. Age 9	26½ in., 6½ lb. walleye on a June bug spinner and crawler	Lake Erie, Erie County
Rickey C. Mummert, Westminster, Md. Age 10	28 in., 4¼ lb. northern pike on a minnow	Codorus Creek, York County
Kenneth Hilbert, Allentown, Pa. Age 15	16 in., 2 lb. 4 oz. bullhead on a nightcrawler	Jordan Creek, Lehigh County
John Chapman, 111, Oliphant Furnace, Pa. Age 11	26 in., 5½ lb. walleye on a beno plug	Yough Lake, Fayette County
William M. Woodside, Millersburg, Pa. Age 11	10¾ in., 12 oz. rock bass on a worm	Black Creek, Dauphin County
Daniel Jockel, Pittsburgh, Pa. Age 9	18¼ in., 3¼ lb. largemouth bass on a nightcrawler	Edinboro Lake, Erie County
Brian Stout-Randy Dendler, Nescopeck, Pa. Ages 11-13	21½ in., 3 lb. 4 oz. brown trout on worms	Ten Mile Run, Columbia County
Randy P. Dendler, Nescopeck, Pa. Age 13	18 in., 2 lb. 2 oz. brown trout on a worm	Ten Mile Run, Columbia County
Brian A. Stout, Nescopeck, Pa. Age 11	27 in., 10 lb. carp on a worm	Ten Mile Run, Columbia County
Jerry Reynold, York, Pa. Age 10	27¼ in., 6 lb. walleye on a hellgramite lure	Pinchot Lake, York County
John Reynold, York, Pa. Age 13	24½ in., 3 lb. 2 oz. walleye on a mepps spinner	Pinchot Lake, York County
J. Gary McDivitt, Camp Hill, Pa. Age 15	11½ in., ½ lb. rock bass on a nightcrawler	Conodoquinet Creek, Cumberland County
Duane Dubernas, Folsom, Pa. Age 15	15 in., 2 lb. bullhead on a worm	Springfield Reservoir, Delaware County
John D. Weller, Birdsboro, Pa. Age 12	14½ in., 1 lb. 1½ oz. yellow perch on a minnow	Bear Wallos Pond, Sullivan County
Michael Shafer, Monroeville, Pa. Age 15	26¾ in., 4½ lb. northern pike on a dardevle	Allegheny River, Warren County
Stanley Bracht, York Haven, Pa. Age 11	21½ in., 3½ lb. channel catfish on a shrimp	York Haven Dam, York County
Mark Palko, Natrona Heights, Pa. Age 10	39 in. muskellunge on a dardevel	Allegheny River, Armstrong County
Steven Tate, York, Pa. Age 12	22 in., 3 lb. bullhead on a red daredevil and small sunny	Muddy Creek, York County
Raymond M. Newman, 11, New Castle, Pa. Age 12	10¾ in., 13 oz. rock bass on a minnow	Elk Creek, Erie County
Joe Stabryla, Pittsburgh, Pa. Age 13	18 in., 3 lb. brown trout on a spinner	Canonsburg Dam, Washington County
Bobby Headings, Sharon, Pa. Age 9	26¾ in., 5 lb. northern pike on a minnow	Shenango Dam, Mercer County
Joseph Myers, Newville, Pa. Age 7	18½ in., 3 lb. 4 oz. brown trout on a minnow	Opossum Lake, Cumberland County
Edward Ancas, W. Wyoming, Pa. Age 14	32 in., 3 lb. eel on a nightcrawler	Susquehanna River, Wyoming County
Curtis Fullom, Camp Hill, Pa. Age 7	36½ in., 12 lb. 4 oz. muskellunge on a pikie	Opossum Lake, Cumberland County
William Dissinger, Duncannon, Pa. Age 14	19¾ in., 3½ lb. brown trout on a rebel	Opossum Lake, Cumberland County
Robert J. Gregor, Paupack, Pa. Age 11	15 in., 1⅜ lb. yellow perch on a minnow	Lake Wallenpaupack, Pike County
Freddie Mason, Lansdale, Pa. Age 12	18 in., 3 lb. largemouth bass on a rebel	Farm Pond, Bucks County

Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



SECRET SNAKE

■ Mr. and Mrs. William Caswell of Clarks Summit were going through the rattlesnake exhibit at the Forksville Archery Festival. A man in front of them was fascinated by the snakes and was probably in another world when Mrs. Caswell's bow accidentally touched his leg. He yelled as he jumped about three feet into the air, thinking he had been bitten by one of the snakes.—***Waterways Patrolman STEPHEN A. SHABBICK*** (Wyoming County).

BOTHERSOME MUSKIES

■ Sunday patrol on the sand and gravel island at Tionesta is not unusual because we have fishermen at this popular spot year around. But what was unusual during patrol there on one Sunday in February was a fisherman returning a 31" muskie to the water through the hole in the ice through which he was fishing. Special Patrolman William Hartle had been watching and finally approached the fisherman, asking why he threw the legal muskie back. The fisherman said he hadn't come to catch muskies, "I came here to catch crappies and I don't want to be bothered with muskies."—***Waterways Patrolman JOSEPH KOPENA*** (Forest and Clarion Counties).

WATCH THE DOG

■ Special Warden Grucela had his hound dog Herby along while on routine patrol of the Delaware River this past summer. He came upon a group of fishermen who had brought their lunch with them and was checking for licenses when "Herby" partook of the picnic lunch. If you see a deputy with a dog, don't worry about the deputy—just watch that dog.—***Waterways Patrolman JOHN W. WEAVER*** (Northampton County).

BASS PLUGGER

■ While on routine patrol of Ford's Pond last winter, accompanied by SWP John Yarema, we came across an elderly gentleman jigging a rod up and down. After checking his license, we asked him what he was fishing for and he quickly answered bass, what else? When asked what he was using for bait, he replied a plug. I asked if I could see it and sure enough this gentleman had a six inch bass plug on. I told him I didn't think he would catch any bass fishing through the ice with such a lure, and I also reminded him that we were presenting an ice fishing clinic the following week at the same pond.—***Waterways Patrolman ROBERT E. FASCHING*** (Lackawanna County).

MERIT BADGE

■ Fishing Schools in this area were very well received this winter, especially by the Boy Scouts. I conducted two schools at the Boy Scout Council Office in Williamsport and 177 boys graduated. All they have to do to get their Fishing Merit Badge is to catch and identify three kinds of fish and three kinds of live bait. I'm sure we can look forward to having many good fishermen and sportsmen from these boys in the near future.—***Waterways Patrolman JAMES H. LAUER*** (Lycoming County).



BRAND X

■ Two men from Honesdale and two from Hawley were fishing Long Pond for rainbow trout. The Hawley boys were using whole corn, as well as the Honesdale fellows. The Honesdale group were catching nothing while the Hawley men nearly had their limit. The two groups got their heads together and decided the trout only wanted corn of a certain BRAND NAME. The corn was traded and everybody started catching trout.—***Waterways Patrolman HARLAND F. REYNOLDS*** (Wayne County).

BOATERS BEAT ICE

■ More cottage owners are keeping ice from shifting their docks, piers and boat houses by using compressed air. All that is needed is an air compressor and plastic tubing. Punch small holes every few inches in the tubing and string it around the pier—this lets bubbles come to the water surface keeping the ice from forming and preventing damage to the structure.—***Waterways Patrolman HARLAND F. REYNOLDS*** (Wayne County).

NO FISH YET

■ Deputy Doug O'Shea and I were working the booth during the Boat Show at the Civic Arena in Pittsburgh, when a lad of about nine approached the stand. Doug said, "Here's a fisherman, I'll bet." The small boy nodded and said "Yes!" I asked "What's the biggest fish you ever caught?" In wide-eyed amazement the boy exclaimed "I never caught any yet!"—***Waterways Patrolman DONALD PARRISH*** (Beaver County).

OLD AGE

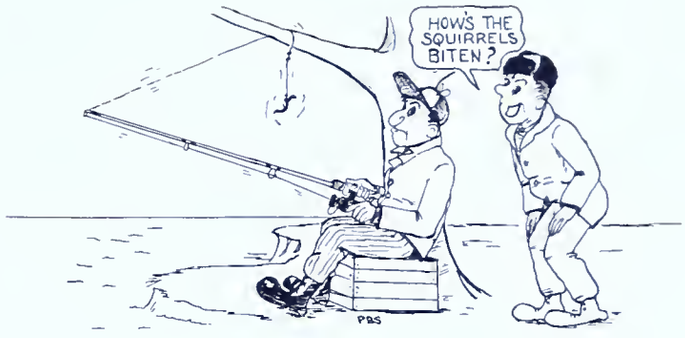
■ On several occasions large fish have been found dead at Koon and Gordon Lakes. One was a largemouth bass found at Koon Lake measuring 20¼ inches long and weighing 8½ pounds. I recall one February a large musky was found at Gordon Lake that was 56 inches long. It had a plug in its throat. This February, a rainbow found at the mouth of Evitts Creek which flows into Koon Lake measured a fraction over 34 inches long and I believe it died from old age!—***Waterways Patrolman WILLIAM E. McILNAY*** (Bedford and Fulton Counties).

EXPERT

■ Waterways Patrolmen conduct many fishing schools throughout the state each year. During the course of these programs we are asked many different types of questions, most of which we can answer. But one young lad, age about seven, stopped me cold one day when he called me aside and said "Mister, I know about all there is to know about catching fish, but the reason I came to this school is to learn how to keep my line from getting snagged all the time." What do you say to a kid like that?—***Waterways Patrolman JAMES T. VALENTINE*** (Huntingdon-Fulton Counties).

LONG WAIT

■ On opening day of the winter fishing season last December Deputy Game Protector Evans Wood watched a fisherman arrive at Quaker Lake about 4:45 A.M., and proceed to get his fishing gear unpacked and ready to go. As 5 A.M. arrived, the fisherman baited his hook and cast his line out, set the rod down to begin the wait. While waiting for a bite, he prepared his breakfast on a small gas stove. As daylight began to break, Deputy Wood went over to talk to the fisherman and ask how his luck was—then he noticed the hook, line, and bait hanging from a tree limb overhead. He suggested that maybe the fisherman would have better luck if he cast his line into the water.—***Waterways Patrolman RICHARD R. ROBERTS*** (Susquehanna County).



PROUD GRADUATE

■ While paying a visit to a local Blue Book Agent a local youngster—a recent FUNdamental of Fishing School Graduate—came up to me and asked if I noticed he was wearing our Fishing School Patch on his shoulder. He also told me "And I wear it with PRIDE."—***Waterways Patrolman STEPHEN A. SHABBICK*** (Wyoming County).

BRIGHT FUTURE

■ Potter County should have another good trout season in 1969. The Cooperative Nurseries in the county had excellent results with their trout this year. Some clubs stocked legal trout last fall while many were stocked preseason. The Potter County Anglers Club had a wonderful hatch of brown trout at their new hatchery. They had 50,000 eggs in their hatching jars and I believe every egg hatched from the number of fingerling trout they now have in their tanks and to date the death rate has been almost nothing. The fingerlings have had excellent care and if nothing happens between now and next fall, fishermen in this area can look forward to a banner year in 1970.—***Waterways Patrolman KENNETH ALEY*** (Potter County).

LOTS OF LIVER

■ Each year the Philipsburg Rod and Gun Club makes it a practice to ask successful deer hunters to donate their deer livers to the Cooperative Nursery so they can be fed to the fish. One sportsman wanted to help the club out so he collected eighteen of the livers and then fed them to the fish—the only thing that this sportsman overlooked was the fact that the livers should be ground before they are fed.—***Waterways Patrolman PAUL F. SWANSON*** (Centre County).

MUSKIES SPOTTED

■ Several trappers had mentioned to me while trapping along the Delaware River this trapping season that they had spotted numerous amounts of muskellunge along the water's edge. One reputable sportsman who trapped along the Delaware told me he saw at least ten of these fish in the legal size class. They have been spotted from Milford to Bushkill.—***Waterways Patrolman MICHAEL BADNER*** (Pike County).



MOST FAMILIAR of Pennsylvania's two poisonous snakes is the rattler. Usually he rattles before he strikes—but not always. Many people are probably unjustifiably afraid of him, and non-poisonous snakes as well.

Snakes have a sincere and confirmed friend in Emmaus herpetologist Dan Kohler—and they are gaining new friends all the time.

SNAKES ALIVE

by TOM FEGELY

"IS HE GONNA PASS the snakes around?" asked the bright-eyed six-year-old as Dan Kohler and a group of first-grade boys carted several cages and aquariums into the room. In anticipation of their first "snake talk," the youngsters buzzed with excitement. Another type of buzzing came from a glass-enclosed box being carried by a dark-haired boy. Nervously, he set it on the table and scampered back to his seat.

Dan Kohler is a resident of Emmaus, Pennsylvania and a collector of snakes and other reptiles for over 28 years. As one of the few experts on the subject, Dan is known to practically every school boy and girl in the Lehigh Valley. As a strong advocate of reptilian conservation, Dan travels to many schools and other organizations along with his serpentine friends.

He begins each talk by reminding the youngsters that they are in Nature's home every time they walk in the woods and that the plants and animals that live there

should not be harmed or destroyed. In order to rescind the age-old adage that "the only good snake is a dead one," Dan emphasizes the need for recognizing the role of snakes as beneficial predators of insects, birds, and other small animals. "Water snakes, for example, suffer a high death rate during trout season because many fishermen feel that the snake infringes upon the chances of filling their creels. Most snakes," Dan explains, "are rodent eaters. There is no other animal on the face of the earth that keeps the rat and mouse population down as snakes do. Regardless, the only thing that could cause their extinction is man."

Dan's basement houses his collection of over 30 poisonous and non-poisonous snakes and lizards. Included in his collection are boa constrictors, black and yellow rat snakes, Mojave and timber rattlers, water snakes, water moccasins, copperheads, milk snakes, corn snakes, and the star of his talks, a 7½ foot long Indigo snake. Dan's two sons, Bob, 16, and Johnny, 7, freely handle their reptilian friends although Johnny is a little too young to handle the poisonous ones. His wife, Shirley, a Biology teacher, and daughters, Kathy 13, and Beth, 15, accompany their father on his collecting trips and to the annual rattlesnake hunt in Morris, Pennsylvania.

"Of the 212 types of snakes in the United States," says Dan, "only four are poisonous—the rattler, copperhead, water moccasin, and coral. Of these only two, the rattler and copperhead, are found in Pennsylvania." Even though he was once bitten by a rattler, Dan emphasizes the fact that a poisonous snakebite is rare. "People get bitten because they provoke a snake, either by teasing it or trying to kill it. Snakes do not want to use their venom (a digestive fluid) for defense. They need it for digestion." To stress his point, Dan always shows a series of slides depicting a hand several hours after having been bitten by a poisonous snake. Those seeing the slides compare the result to slamming the hand with a sledge hammer. "If a person does get bitten by a poisonous snake, he should remain calm and head for the nearest hospital," advises Dan. When asked how to remain calm at the prospect of having been bitten by a poisonous snake, he cites his own experience. One afternoon while cleaning cages, Dan carelessly attempted to change the paper in the bottom of a cage without first removing its resident, a timber rattler. The rattlesnake responded by striking Dan on the hand. Calmly he put on his jacket, placed his hand in his pocket, and told his wife that he had an appointment to have the oil changed in the car. As luck would have it, half way to the hospital, he had a flat tire. Pulling the car off the road, he walked to a gas station and explained his plight to the attendant. After calming down the excited attendant, Dan was rushed to the hospital. Upon producing several insurance cards and answering a few questions, he was given a shot of antivenom. He then phoned his wife and told her the story.

"Don't believe what you see on television about whiskey being a cure for snakebite;" warns Dan, "if anything, it will make the poison spread faster. In the days of the Old West if anyone was ever bitten by a snake, he would take a couple of slugs of whiskey and go to sleep. Usually

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ABOVE—FIVE-YEAR-OLD David Schaffer pats a "puff adder" or hognose snake as the rest of the group watches. This snake earns its name by its upturned nose and its habit of hissing, flattening its head and neck and playing "possum" upon encountering danger.

BELOW—RATTLESNAKE venom is used for experimental purposes in many laboratories but is not used in the production of antivenom. Here Dan Kohler demonstrates the "milking" of a timber rattler.



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HAPPINESS IS FISHING?

"Well, I must run . . . nice meeting you, Helen H."

As she walked away I noticed her right stocking sagging earthward as though something had come unhooked. I wondered whether I should tell her or let it go but decided she should know and quickly followed her to break the sad news.

"O, I know it," she said. "It looks terrible but my husband was going trolling for walleyes today and couldn't find any three-way swivels for the trolling rig. Well . . . you know that little hickey at the bottom of the girdle that holds the stocking up . . . with just a little imagination that makes the dandiest swivel you ever saw . . ."

As my gaze followed her down the street, merrily striding along . . . saggy stocking and all I had the feeling I had found a real fishing friend . . . something just as rare in a woman's world as in a man's.

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SNAKES ALIVE



he would wake up with nothing worse than a hangover. What he didn't know was that he was bitten by a non-poisonous snake. If it would have been poisonous, he would have been quite sick or he never would have awakened in the first place."

Dan also warns of the fallacy that a rattler will rattle before it strikes. "In reality," says Dan, "he rattles only because he is scared and is actually shaking as much as a frightened person would. This can be interpreted as a warning although it does not always precede a strike."

Because he feels that much apprehension and excitement can be avoided by proper knowledge of the habits and characteristics of snakes, Dan offers a quick course in snake identification. As an example, he always takes with him a copperhead and its look-alike cousin, the milk snake. "The copperhead," he explains, "has a triangular rust colored head and dull skin, whereas, the milk snake has a V-shaped patch on the back of its head and has shiny skin. Even though they are somewhat similar, they can be easily identified at a distance."

Many children have lost or at least lessened their fear of snakes by handling Dan's large Indigo. Native of Florida, Indie, the Indigo's name, is very gentle. Weighing 7 pounds he is quite a load for any youngster. Regardless, kids from six to sixty delight in draping him around their necks.

Dan must sometimes play midwife to a mother copperhead or rattler while at the same time taking pictures. Besides his interest in herpetology, Dan is also a fine photographer and has some excellent slides and photographs of his specimens. "After the young are born," explains Dan, "mamma snake goes her way and the babies go theirs. There is no parental care after birth. It is at this time when the young snakes are preyed upon by larger birds and mammals. Most reptiles lay eggs in sand or soft earth, but many snakes bear their young alive." If there are more born than Dan feels he needs, they are taken to a suitable area and released—a gesture which proves that Dan not only talks conservation but lives it, too.

Even though still maligned by many adults, snakes are tolerated far more than they used to be. Exposing young people to reptiles and educating them at the same time has somewhat lessened the symbol of evilness associated with snakes. If my word is doubted, there is always proof in the sight of a 3½-foot-tall first-grader holding a 7½-foot-long snake. And if indeed the reptiles ever had a sympathetic and understanding friend, Dan Kohler is the man.



DAN KOHLER puts aside many of the fears youngsters might have of reptiles with his lectures and demonstrations, while at the same time cautioning his young audiences to play safe when around reptiles they can't identify.

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TO TROUT -with love

allows only its head and legs to protrude in order to catch the minute particles of food on which it will subsist. If the tube is touched, the head and legs are withdrawn with disquieting swiftness.

Upon reaching the pupation stage of the life cycle, the worm seals the open end of the tube and hibernates. When the pupa phase is complete, the insect cuts itself free and swims to the surface, propelled by two oar-like leg appendages, whereupon the skin splits and the adult emerges to fly laboriously to the shore foliage to rest and dry its wings in anticipation of the mating flight which will take place at night, some two or three days hence.

Another, and very appropriate name for this insect, is Moth Fly. The adult of the species very closely resembles a moth, about one-half inch in length and of dull gray or brown coloration.

The fly tyer must use caution when building the Caddis dry fly to construct it of the lightest materials available in order to maintain its floating properties. The wings are of duck flight quill or relatively opaque hackle tips tied with concave sides together, tent-like, and equal to the body length of the fly. Hackle is of short radius and slightly less sparse than May Fly hackle, thus presenting the difficult floating properties.

THE TRUE FLIES

To the trout, and therefore to the trout angler, the third most important aquatic dietary complement is the order *Diptera,* or two-winged flies. Among this group of high-protein fish food are found the myriad gnats, crane flies, and no-see-ums, along with the more voracious mosquitos, deer flies, horse flies, and black flies. The slashing agressiveness of trout surfacing for the adults of this order is almost enough to avenge the angler tormented by these vicious pests during the warm, humid days of late June, July, and early August.

Certain of these species are wholly aquatic while most are only partially so. Characteristic of the order is the fact that the larvae are completely devoid of legs. Hence, any legless, worm-like larva form may be considered reliable evidence of the presence of *Diptera.*

Wormlike and cylindrical, without any means of efficient locomotion in rapid currents, the larvae of this order is almost invariably found in the deeper pools and bankside pockets of quiet water. Although infrequent caches of these larvae may occasionally be found behind the protective buffers of large midstream obstructions, the best place to look for the species is in the masses of decaying vegetation and rotting trash of the quiet, flat water.

Although there is a second, or pupa phase during the life cycle of this insect, it is spent so well concealed that the species is relatively unavailable to the fish during this period. Therefore this stage is of little importance to the angler.

It is the third phase of the life cycle, the adult stage, that most piques the interest of angler and trout alike. While the insect is feeding on the angler, the trout is feeding on the insect. In this stage, artificial counterparts of this species must take on definite physical characteristics to tempt the feeding trout. Hook size may vary from size 28 to size 10. A dramatic, tail-less body structure is a necessity for proper counterfeiture and all are two-winged with an enlarged thorax and spider radius hackle.

THE SPECIALISTS

The beginner, as well as the veteran angler, will soon note that, as the year progresses, the receding water table begins to leave the streams shallower and clearer, the "rise and take" pattern of the feeding trout takes on new characteristics, and an inventory of the insect life floating on the stream surface reveals an unusual assortment of insect orders; for most of the species found at this time of year are non-aquatic species.

Until recent years, these "dog days" were considered to be a good time to dig up a can of worms, seine a tubful of minnows, or resort to the hardware of spinners and plugs and go in search of warm water fish such as bass, pickerel, and bluegills.

However, in July of 1949, on the little Letort Spring Run, sportsman-angler Vince Marinaro introduced the dry fly fisherman to something called a "Jassid," the angler's imitation of the tiny leaf hopper of the order *Homoptera.* So began a new era of dry fly angling. Fertile minds, restored by the creation of the Jassid, searched for other land bound insects which were known to be welcome additions to trout diets.

New imitations were revealed in short order: the bane of the rose grower, the Japanese Beetle (*Coleoptera*); the red and black ants along with the honey and bumble bees (*Hymenoptera*) the green and brown grasshoppers and the cricket (*Orthoptera*) all were introduced to the angler.

Gradually, it was discovered that while the trout took the live insects of these species readily enough as they were chummed into the line of drift, these finned adversaries seemed not nearly as eager to dine on the artificial interpretations of the anglers. Many anglers were unimpressed and returned to their casting and spinning outfits: but a few diehards persevered and went back to their figurative drawing boards.

The man with the answer will have to remain nameless for he probably was not alone in his discovery. Consider now, as he did: The water is low and clear. The magnifying eye of the surface tension affords each fish an unrivalled view of his approaching dinner. The answer now becomes obvious. The imitations were unacceptable only because they were not imitations. They were approximations, close calls, near misses! The late summer dry flies would have to be such close counterfeits that the fabricators of flies would have to become virtual entomologists to fool their keensighted quarry.

Many do-it-yourselfers fell by the wayside along with a considerable group of professional fly tyers. But enough tyers remained to supply the angling world with sufficient infinitesimal flies to maintain a late summer of trout fishing fun. As the hook size approaches 1/16 inch (the gap of a number 28 hook, upon which the red ant is most suitably tied), a standard size 12 hook almost becomes something with which to anchor your boat!

CONTINUED NEXT MONTH!

MODERN CAMPING by DEL & LOIS KERR

HOLIDAY TRIP—

INDEPENDENCE DAY—the Fourth of July—comes on a Friday this year. This means that just about everybody will have a long holiday weekend. Campers will be out in full force for the biggest holiday of the summer season.

Unless you can plan to arrive very early in the week, the chances of being sure to find a campsite at your favorite state park are almost nil. This is a time to really take advantage of the advanced registration privilege at most private campgrounds. Try to get your reservations in as soon as possible, though, because they are rapidly filling up.

Why not plan to take in a special event or visit an area with special patriotic significance on this birthday of our great nation?

It is interesting, for example, to visit an area on or near that date when a famous event in history took place. It helps your children to appreciate what such happenings meant in history when they can have a sort of "I was there" feeling.

The famous turning point of the Civil War took place July 1 to 3, 1863 at Gettysburg. Touring the battlefield in July you can appreciate more the conditions under which these brave men fought.

In 1963 at the Centennial of the battle, the National Park Service cleared surrounding forest areas and restored the land much as it was at the time of the confrontation between the Blue and the Grey forces. There is a $1,000,000 visitor center from which emanate "walking tours" and guided bus tours.

The National Museum houses a complete display of relics from the battle. A 960-seat auditorium features an electric map and a narration of the important events in this milestone of our history.

In the National Civil War Wax Museum are 200 life-sized figures covering the story of the years 1860–65. Nearby the Hall of Presidents has wax replicas of all of our presidents. Throughout the area are interesting exhibits of great significance.

For a home base while touring the area, we recommend Granite Hill Family Campground on Route 116, six miles west of Gettysburg. A total of 130 sites are available. The campground features all modern sanitary facilities including showers, water hook-ups and electricity. Supplies can be purchased at a camp store on the grounds. Granite Hill has the added attraction of a farm setting, complete with animals, hay rides and square dances.

Another fine campground nearby is the Drummer Boy Campground also on Route 116, one mile east of Gettysburg with 32 sites.

What better time could there be than the Fourth of July weekend to visit Philadelphia, the birthplace of the nation. In Independence Square, which the Philadelphia city fathers decreed in 1769 was "to remain a publick greene and walke forever," you'll find Independence Hall. There you can see the Liberty Bell and the Assembly Room where the Continental Congress adopted the Declaration of Independence on that first Fourth of July almost 200 years ago.

Next door is the Hall where Congress met between 1790 and 1800. East of Independence Hall is Old City Hall which housed the first U.S. Supreme Court.

Campgrounds are located in Chester County, near enough to be within touring distance of Philadelphia but far enough away to avoid the constant hustle and bustle of the city.

Brandywine Meadows on famous Brandywine Creek has 163 sites and all modern up-to-date facilities. Frank's Folly at Lyndell has 50 sites.

Another outstanding holiday attraction in the southeastern section of the state is the Pennsylvania Dutch Folk Festival, held annually at Kutztown in the heart of the "Dutch" country. This event runs each year for a whole week including the Fourth of July.

Popular Pennsylvania Dutch dishes such as fasnachts, shoofly pie, Snitz and Gnepp, and many others, are available to tempt your palate. Demonstrations of ways of early folk life are conducted daily. These include blacksmith forging, apple butter boiling, quilting, basket weaving, tinwear and hex signs. Dances and skits are enacted.

Write the Pennsylvania Folklife Society, 218 W. Main St., Kutztown for dates and events scheduled for this year's fair.

Old Dutch Mill Park is located 3 miles north of Kutztown. There are 60 campsites, hot showers and flush toilets. A store on the premises sells campers' supplies. An old mill and a one room schoolhouse are on the grounds.

Within easy driving distance is one of the cleanest, most well-planned private campgrounds we've seen. Pennsylvania Dutch Campsites at Shartlesville has 75 sites. There are a variety of playground activities for both young and old. An outdoor pavilion serves for church services and other special events and dances. Supplies and snacks can be purchased at the office.

Also at Shartlesville is Appalachian Camp Sites, so named because it is within a few miles of the famous Appalachian Trail. Most of the sites are in a lovely hardwood forest.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



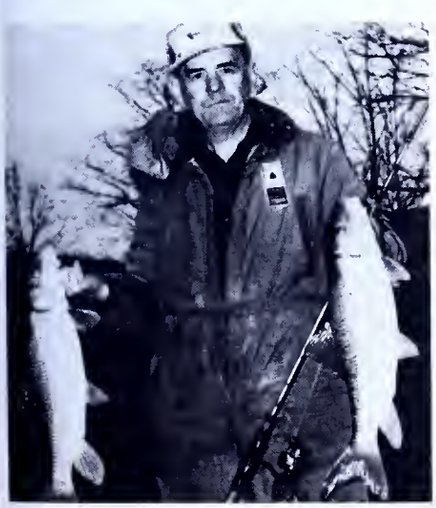
TITUSVILLE angler Jim Shrout holds 34 inch northern he caught on a tip-up with a shiner at Sugar Lake in Crawford County during the winter.

MONTROSE angler Basil Casselberry caught 7 pound, 6 ounce, 23 inch largemouth while fishing Tuscarora Lake in Susquehanna County. It hit Pfluger Zam lure.





COHO FISHERMEN Robert Anderson and Ed Wenzel, both of Erie, with some early run coho caught last fall just off Godfrey Run. All were taken on a mepps.



FISHERMAN and outdoor columnist Steve Szalewicz of Oil City holds a pair of big red tail suckers he caught during the spring from the Allegheny River near Trunkeyville.



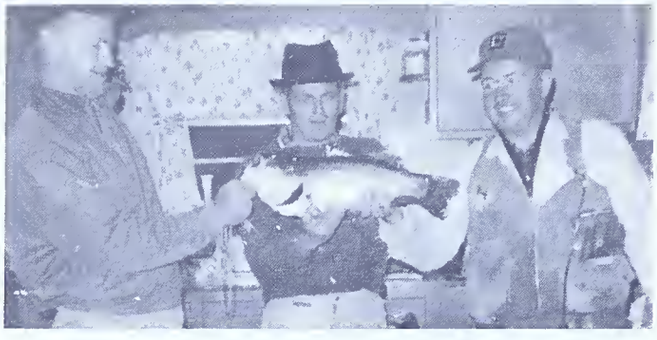
TWO TIME state fishing champ George Wagner holds stinger of bass caught during two day outing on the Allegheny River near Tionesta.



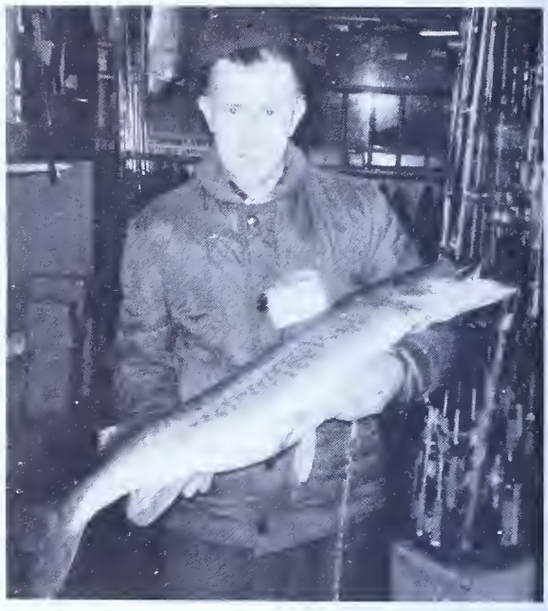
DAVID OVECKA of Bethlehem holds 27 3/16 inch, 5 pound chain pickerel which he caught on a tip-up and live minnow at Bangor Dam in Northampton County during the winter.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



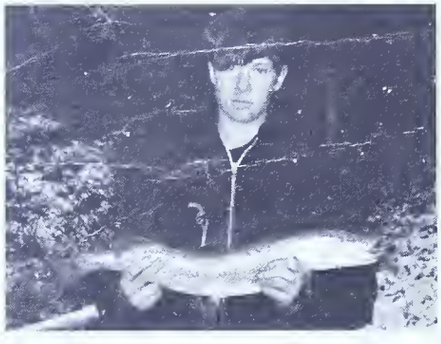
ANGLER Philip W. O'Neil and friends with the 24 inch, 6¾ pound largemouth bass O'Neil caught sometime ago at the Churchville Reservoir in Bucks County. It hit a plastic worm.



WRIGHTSVILLE angler the Rev. Warren W. Helder holds 40½ inch, 18 pound, 8 ounce muskie he caught at Brunners Island on the Susquehanna.



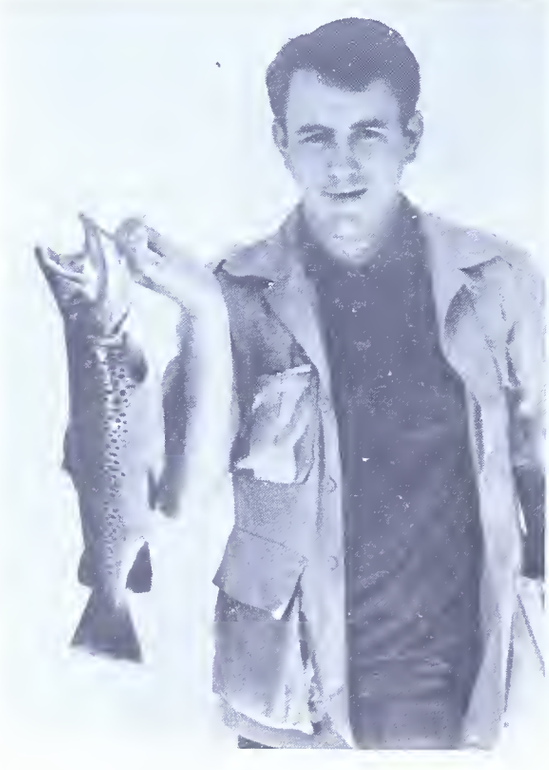
BIG ELK LAKE in Susquehanna County produced this 31½ inch, 8 pound 2 ounce northern for Shavertown angler John Malak. Bait wasn't listed.



THE BEAVER RIVER in Beaver County produced this 27¼ inch, 5½ pound northern for angler David Stone, 14, of West Bridgewater. It hit a silver minnow and won a citation.



JAMES D. VALENTINE, son of Waterways Patrolman Jim Valentine of Huntingdon won two Junior Citations—one for a 28 inch, 9 pound walleye; the other for a 22 inch, 3½ pound walleye.



BIG BROWN TROUT—24¾ inches, 4 pounds—was caught by fisherman Joe E. Colton of Grantham last May from the Yellow Breeches. Lure used wasn't listed.



BERWICK ANGLER Al Steward and son hold 24 inch, 4½ pound brown trout he caught in Fishing Creek near Orangeville. It hit a nightcrawler.



SCRANTON ANGLERS Mike and Steve Duricko with a 30 inch, 5 pound northern caught at Beaver Dam by Mike.



TWO NICE PERCH caught by David Godumski of Wilkes-Barre measured 15 and 15½ inches, and each weighed nearly 1½ pounds. Caught at Nigger Pond near Mehoopany on live bait.



RIDGWAY ANGLER Frank Hughes, a director of the Elk County Anglers Club, holds 22 inch brown trout he caught in the McKean County section of the Kinzua while ice fishing.



FISHERMEN Skip Shetler and Paul Naus Jr. of Berwick and Nescopeck hold twin 5 pound bass they caught minutes apart in nearly the same spot from a pond in Columbia County.



BEAVER FALLS fisherman Timothy Small holds 42 in., 18 lb. musky caught at Presque Isle Bay.



FRANK PALMER of Montrose landed big bluegill—measured 11 inches, weighed 1 pound—from Little Elk Lake.



ANGLER Gerald W. Laird of Fredonia and young helper with 38 inch, 15 pound muskie he landed from Stoneboro Lake.



ICE FISHING CONTEST winners at Cloe Lake: Bill Fallet, Pittsburgh; Bill Fiscus, Sigel; and Robert Grube, Albion. Respectively they caught: 18 inch brown, 13 inch brook, and 12 inch brook.

INFORMATION . . .

Don't forget to include all pertinent information when you send your picture to Fish Tales. Include length, weight, species, where caught, and method and bait used as well as your name and address (so we may return your picture) all on the back of the photo.



KANE FISHERMAN Jack Bell with brown trout from the South Branch of Kinzua Creek last season. The big one is 23½ in., 4½ lbs.



ELEVEN-YEAR-OLD William Kelly of Dushore landed 26 inch, 6¾ pound walleye from the Susquehanna River in Bradford County last fall.



MAYFIELD anglers Al Rossi and Al Brivi hold big stringer of pickerel they landed from Duck Harbor Pond in Wayne County.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

STUBBORN—

THERE'S A NEW WORD to add to the pet adjectives that have been used to describe cooperative nursery sportsmen. The word is *stubborn*—to be added to such words as cooperation, dedication and all the others that have been written into this column in the last year or so.

The case in point is the St. Marys Sportsmen Club of Elk County. They have a water problem that limits trout production to about six months a year, but the boys stay with it in spite of the troubles. In fact this is their tenth year of staying with it—the cooperative nursery project began in 1959.

John Goodreau, a club director and our host for the visit, told it this way. "Our basic problem is a winter freeze-out. The raceways are built above ground and the water freezes solid in severe weather and that takes care of the trout if we try to hold them over to spring. As a result we do our stocking in the fall after having had the fish for about six months."



CLUB DIRECTOR John Goodreau and Paul Byers, assistant Cooperative Nursery Coordinator, at St. Marys site.

The freeze-out wasn't the only water problem. Summer temperatures warm the water and occasionally there is an oxygen deficiency. At the moment these issues are being taken care of by a roofed shelter over the raceways to help with the temperature problem, and a sump pump has been used to recirculate and aerate the water when fish are being raised.

Future plans call for a pipeline to bring better water to the nursery and other constructional features to enhance the project and set up a year round growth situation. Surveys are being conducted to find a better water source on or near the club property and there is some consideration being given to drilling a well. The point is that the boys are not about to give up and are not satisfied with the measures they've been forced to use over the last several years.

The progressive spirit of the group is measured by one of their recent reports to Bob Brown, Cooperative Nursery Coordinator. The report concerned the October 27 stocking of their trout with the prideful notation that it was one of their best years in terms of growth and low mortality rate.

The trout, usually brooks, are given a diet of crumbles and pellets as their growth permits. Some liver is used when available by nursery manager, Joe Fritz. The end product is a well-developed fish ready for fall stocking and final maturity in the stream for the spring fishing season.

Water wasn't the only problem that faced the St. Marys Sportsmen. Predators forced screening of the raceways. Locked doors became necessary as safety features to keep youngsters from falling into the raceways since the club grounds are used for many public outings by the town of St. Marys. The end result, however was not a grim prison-like structure that warned all to beware; but rather there is a nicely constructed affair with open-meshed wiring that restricts natural predators but does not restrict visitors to the grounds from observing the fish. The roof, as mentioned before, gives shade and helps with the temperature problem.

Most of this column has been about the problems of the nursery. On the positive side is the location and name of the nursery. In a beautiful wooded valley a mile or so beyond the town is found the club property. Appropriately enough the valley is called Flower Valley and the nursery is so named. Facilities include the club house, a barn set up for large group activities and storage, a kitchen building and eating pavillions, a warm water pond, shooting ranges of various kinds, and of course, the nursery.

Membership in the club is set at 2,250 senior members with an active junior membership program. Funds for the nursery are simply extracted from the general treasury upon approval of the 12 man board of directors. John Goodreau indicated that there was no problem here. Dues provide the chief source of income with some additional monies being derived from rental of the club facilities to service groups and associations in the St. Marys area.

Problems and activities related to the nursery are handled through the fish committee with Regis Erich as the chairman. Within the committee, Joe Fritz serves as nursery manager and other members help as needed. It, the nursery, is run like a well-oiled machine for about six months of the year.

It's a safe bet that the stubbornness of the St. Marys Sportsmen will make *Casting with the Co-ops* in their area a 12 month thing before many more seasons go by.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

FROM J. R., DuBOIS:

"The rubber coating on my inflatable raft has developed some cracks in storage—can these be repaired with some type of cement?"

—Inflatable rafts are of a number of different materials, eaeh of whieh has its own requirements for repair and patehing. The manufaeturer of your raft will be able to furnish a kit with everything needed for maintenanee, so we suggest writing the eompany. Also be eareful to dry the raft thoroughly, sprinkle it liberally with taleum powder, and roll, rather than fold it when storing it away.

* * *

FROM J. H. M., PITTSBURGH:

"Is there any company in this area which will transport a 30-foot cruiser to Florida?"

—The only trucking firm speeializing in boat hauling is Kenosha Auto Transport's Boat Transit Division. For rates and information, eall their Laneaster terminal at (717) 393-1503.

* * *

FROM T. V. C., RENOVO:

"The engine in my runabout has been overheating, and removing the thermostat has not helped. What do you suggest?"

—First, put the thermostat baek, sinee it eontrols the eooling water bypass and must be in plaee in order to get any eireulation at all through the block. Cheek the water pump impellers, and replace them if the teeth are ehewed off. Flush out all the lines with a water hose, and be sure to cheek the intake strainer on the bottom of hull. If none of this helps, eheek for a blown or leaking head gasket.

* * *

FROM C. J. B., JOHNSTOWN:

"We pull a fishing boat behind our pickup camper, but it's very difficult to back down ramps, etc., since the boat and trailer cannot be seen. What can we do?"

—Just install another ball for the trailer on the front bumper of your piekup. With this arrangement, you can thread the trailer through an obstacle course, pushing it ahead of you.

* * *

FROM H. F. G., COLUMBIA:

"The generator on our 22-foot cruiser has been rebuilt, but it still doesn't seem to be keeping the battery charged. Can the output of the generator be increased in any way?"

—The generator you describe is designed to produee about 8 to 10 amperes; just enough for ignition and navigation lights. You might install an alternator, whieh will make all the juiee you ean possibly use, but we would advise having a meehanic do the work.

* * *

FROM W. N. K., REYNOLDSVILLE:

"Why are catamaran sailboats faster than the conventional types?"

—All other things being equal, the amount of wetted surfaee subjeet to drag will determine boat speed. A sailing eatamaran has adequate stability by virtue of its arrangement, and needs no more hull in the water than required by displaeement. The two long, narrow hulls are also effeetive to counter leeway, and so no fin keel or eenterboard is needed, again redueing the amount of wetted surfaee.

* * *

FROM S. B. T., WASHINGTON:

"My inboard engine occasionally makes a terrible screeching noise just after starting, which stops at once but is very unnerving; what causes this and how can it be cured?"

—The noise is a slipping rubber belt on your alternator. Adjust the tension if the belt is in good shape; replace the belt if it is shiny, cracked, frayed or otherwise ailing. This belt also drives the eooling water pump on your engine, so you should always carry a spare just in ease.

* * *

FROM A. H., PHILADELPHIA:

"What is the best way to compensate a boat compass?"

—Any boat suitable for ocean or eoastwise eruising that is likely to need a compass for navigation is certainly worth the modest investment required to install a gyro compass, which reads true bearings and is unaffected by stray eurrents or magnetic disturbances. The magneti compass is today little more than an interesting relic, n withstanding the amount of time wasted by many boati in studying its use, and learning the intricate method quired to convert the indieated reading to one which or may not be useful.

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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



Permanent Improvement?

Road Work Ahead—Your Tax Dollars At Work—Temporary Inconvenience, Permanent Improvement.

Most of us quietly gripe a bit as we bump along at a snail's pace over these "Temporary Inconveniences." Or we cuss our luck as we back track a few miles to get around a "Road Closed" barricade. However, we all want better roads, safer roads, more roads to carry us to work, to vacation areas, to the city, to the country, to grandma's house and on and on. We are pleased to see real evidence that our hard earned dollars that go for liquid fuels tax, auto and truck license fees and general taxes are being spent to construct the smooth roads we so greatly need and want in this age of high speed travel.

Unfortunately we cannot so simply overlook the fact that too often our own road tax dollars have served to bring destruction, as a by-product of road construction, to a precious natural resource—our trout streams.

It has apparently become habit for the hard working highway engineer to shrug off the complaints of a few so-called "fishing nuts" or to glibly note that the stream will soon be back to normal. Even more infuriating has been the frequent lack of recognition by highway planners and designers that a natural stream, wending its way down a mountainside has any value—except possibly as the easiest area in which to construct a new roadway.

To Pennsylvania's fishermen more descriptive narration of *highway construction stream destruction* projects is unnecessary. Every county has scars to remind fishermen and conservationists of how the creek used to be before the "new road" went through. The list of highway construction trout stream casualties is unfortunately long.

The policy of road building agencies to firmly and completely ignore the lasting damage of re-channelling, re-aligning, widening and otherwise destroying streams when they get in the way of a road project is not new. Frankly it seems that's the way its always been—however, we believe this attitude can and will change. *There is no reason we cannot have good roads throughout our rural and mountain areas without sacrificing our streams.*

The Federal Government long ago recognized the need for legislation to positively require coordination between road building agencies and conservation agencies on highway projects that affected fish and wildlife resources. On road projects today where Federal funds are involved, these Federal dollars can be withheld if fish and wildlife resources are not properly considered. Hopefully this same heavy handed method of gaining full and proper protection of our remaining good trout waters will not be necessary in Pennsylvania. Certainly reason and mutual understanding can be reached between highway builders and conservation interests without resorting to restrictive legislation.

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JULY 1969 VOL. 38 NO. 7

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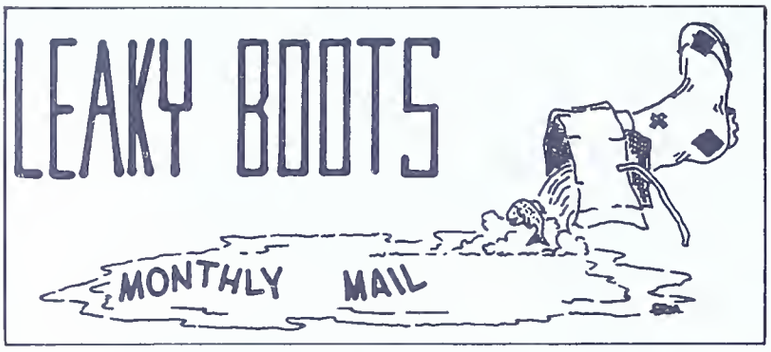
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Cover Art/MARILYN REA

D. THOMAS EGGLER, EDITOR

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FISHWAY SUPPORT—

Dear Mr. Bielo:

I have just read "Fishways—Part II," (March, 1969), and want to agree heartily with your statement. I sincerely hope that you will be able to immediately make plans for going ahead and building fishways at the dams which block up-stream migration of shad, striped bass, and other migratory fish.

This matter has lain idle entirely too long and those of us who are interested look forward to your accomplishing this long overdue innovation.

If there is anything I can do to assist you in any way, please feel free to call on me.

With every good wish,

—John P. Saylor,
Member of Congress (Twenty-Second District)

PREFER FISHING

Gentlemen:

Enclosed is my check for a three year renewal to the Pennsylvania Angler which I have been enjoying for over 20 years.

I am a firm believer that the greatest majority of "Angler" readers would prefer not to have your magazine identified with boating, but remain strictly the Pennsylvania Angler. An occasional boating article is fine but why the front cover write up as a Fishing-Boating magazine? Would you consider running a small questionnaire in your Leaky Boots column asking the readers which they prefer?

In closing I would like to thank the Pennsylvania Fish Commission (Mr. Bielo in particular) for doing a fine job.

—Steve Valencic, Natrona Heights



"THEY CAN'T BE TOO WELL OFF. THEY DON'T EVEN HAVE A NEW CAR TO PULL THEIR NEW BOAT."

CANOE COMEBACK—

Gentlemen:

Bob Miller certainly did a nice job with his article in the March issue entitled "Canoe Comeback." I'd like to add a couple of items that might also be of interest to canoers.

He mentioned several Pennsylvanians who were outstanding nationally in the sport, one of which was Bob McNair of Philadelphia. He mentioned McNair in connection with a guide book, but I might add that Mr. McNair has also written an excellent instruction book on river canoeing. The American Red Cross publishes a thorough 445 page manual for beginners, but once that's mastered, canoeists should get Mr. McNair's book "Basic River Canoeing" to learn how to handle moving water and all the latest techniques.

Two other Pennsylvanians active for years in canoeing circles are Ted Alteneder, Jr. of Philadelphia, present editor of The American Canoe Association's magazine, "American Canoeist," and Don DeLorenzo of Allentown, cruising editor of the magazine. Their magazine is available for $2 per year by writing Ted at 1217 Spring Garden St., Philadelphia, Pa. 19123.

Another national canoe outfit that publishes an excellent magazine is The American White Water Affiliate, 456 Hawthorne, San Bruno, Calif. 94066.

The newest national canoeing organization is the United States Canoe Association. They have good Pennsylvania representation and I am their cruising chairman. Their publication can be obtained from C. W. Moore, 6338 Hoover Road, Indianapolis, Ind. 46260.

Miller mentioned Sundquist's Western Pennsylvania Canoeing Guide. I might add that a complete guide for the entire state is being prepared by the Bureau of State Parks and any suggestions should be sent to Stan Peterson, Bureau of State Parks, Feller Bldg., 301 Market St., Harrisburg, Pa. 17101.

In addition to open conventional canoes which usually need two people for maximum pleasure the single place touring or cruising kayak made of fiberglass is growing in popularity. Until recently such outfits as Struer of Denmark, or Klepper of West Germany were the only suppliers, but lately The Old Town Company is offering them for sale. These sleek kayaks move through the water with less effort even than a canoe and are a lot of fun.

And did you know that one of the largest manufacturers of canoe paddles and boat oars is located at Albion, Pennsylvania? It's Swanson Boat Oar Factory and they welcome visitors.

Ever notice how many illustrations in catalogues and magazines showing experts fishing, show them in a canoe?

Miller did a good job of giving the reasons in his article. It's instant fun, just add water!

—Ed K. Holloway, Sharon

The material collected by Mr. Peterson has been turned over to the Waterways and Conservation Education Divisions of the Pennsylvania Fish Commission for additional work and final preparations before publication. Most of the material in the guide has been assembled by experienced canoeists who have actually canoed most of Pennsylvania's waterways. Hopefully it will be ready for distribution prior to the 1970 boating season.

—Tom Eggler, editor

STOCKING SUGGESTIONS—

Gentlemen:

I have been a subscriber to the Pennsylvania Angler since moving here from Minnesota a little over a year ago. Since then, I have watched a controversy regarding trout stocking and regulations reflected in the letters you receive and some of your lengthy replies. Allow me to throw my "two cents" in.

I base some of my opinions on experience trout fishing in Iowa, which certainly is different than here in the number of streams and fishing pressure, but nevertheless certain parallels can be made. Iowa streams are open all year. They have a trout stamp that is used for habitat improvement and right-of-way acquisition. They stock openly before Memorial Day and July 4th—otherwise it is a secret, intermittent stocking.

I suggest a trout stamp for Pennsylvania. This would eliminate a large section of fish hogs and kids. (You can fight juvenile delinquency with sunfish as well as trout.) I also suggest you lower the limit to no more than four. The same amount will be caught, only better distributed. I also would like to see stocking evenly distributed throughout the year. You could have (like New Jersey) no fishing the day of, or even after, stocking.

Most important of all, is habitat control. In the short time I have resided here, I have seen more than one stream destroyed in the name of progress. It seems paradoxical, but perhaps not unique to this state, that the Highway Department spends money to destroy streams (although indirectly), while your group spends sums to save them.

Can't you get together?

—Jerome Grehl, Easton

BECOMING "OLD TIMER"—

Gentlemen:

I intended to write to you last summer expressing my appreciative thoughts regarding "Oil Moon Over Pithole" but put off writing.

I heard of some of the happenings 50 or 60 years ago from my father who, as a lad of 18 with his father, uncle and a cousin, went to Pithole in the late summer of 1865 to cut and shape timbers for the drillers.

They dug the earth from a hillside, lined it with logs, covered it with logs, saplings and earth and had what was known as a "dug out" where they put in during the winter of '65-66, returning to their homes near Gettysburg in June of 1866.

His father and uncle were mill-wrights and they used their knowledge of edged tools, axes, broad axes, etc. to make "mud-sills," "walking beams," "Johnson Bars," etc. which was used by the well drillers.

He told me they never ventured out after dark unless there were two of them and sometimes three, as every night someone was beaten and murders were not uncommon.

He died in 1941 at the age of 94 but some of the happenings were clear in his mind until just a few years before his death. Which brings to mind another reason for this letter. I am getting to be another "old timer"—79 years old—and have subscribed to the "Angler" since shortly after it was first published. Enclosed is a check for another year's extension, as my present subscription expires soon.

Now as to a letter in the July, 1968 issue from a Mr. Fred Hardick of Punxsutawney. Seems to me he hasn't made too much of an effort to learn to fly fish. He apparently was unwilling to invest in a fly rod, line, reel, etc. and tried to get on to the hang of it with a spinning outfit.

I have been catching trout with flies for about 50 years and have taught 6 or 8 fellows how to cast a fly and in 10 or 15 minutes most are able to catch a trout. If Hardick or anyone else is unwilling to make such an effort and spent a few minutes time, why should they expect to be granted special privileges to fish fly projects with spinning rigs?

—L. R. McKenrick, Curwensville

"GONE FISHING"

Dear Sirs:

As someone who has subscribed to the Pennsylvania Angler for many years, I feel it is my turn to submit a suggestion. Every year you have a subscription drive, pushing your magazine, at a very modest cost, and usually a little gimmick as well. Rather than send out maps or other such items that can get lost so easily, why not offer an adhesive backed sticker that any fisherman worth his salt can mount on a piece of pine or plywood. The sticker would be in simulated paint and simply state "Gone Fishin'."

This would stimulate both the fishermen and the magazine sales. The idea is submitted for whatever use you may be able to make of it.

—Samuel Hurwitz, DDS, Morrisville

NEW ADDRESS?

Each month the circulation section of the Pennsylvania Angler receives several letters from subscribers complaining that their copy of the magazine is not being sent to their new address, as they requested.

Nine times out of ten an investigation shows that at the time they requested their magazine be sent to a new address they failed to include their old address.

Subscribers requesting a change of address must include BOTH the old and the new address to insure the change being completed. And don't forget that zip code!

Questions concerning your subscription should be addressed to:

Subscriptions
The Pennsylvania Angler
Box 1673
Harrisburg, Pennsylvania 17120



FISHING OUTLOOK

By-- Stan Paulakovich

THE ALLEGHENY—

JULY IS RELAXING time—plenty of warm sunny days, pleasant evenings. Vacation time is here. Late afternoons find the fishermen out on the water. A solitary rowboat lies anchored just off a huge weed bed, on a still, glassy lake. Two red and white bobbers, just at the edge of the weeds, bob gently as the minnows try to reach the security of the lily pads. The fisherman lying across the center seat, his head propped up on a seat cushion, periodically opens one eye to check the situation. Passing through his mind's eye are visions of past experiences. The five pound smallmouth that fell for a rubber worm or the Husky-Musky candidate that took with it fifty yards of eight pound test line. OOPS—there goes the bobber!

The nervousness of the minnow is reflected in the bobber. Something's going on. . . . Slowly, almost imperceptibly, the bobber begins to move. Sometimes on the surface, sometimes just under it. Like a sneak thief in the night it heads for the safety of the weeds. To pull now would simply tear the minnow off, or jerk it from the fish's mouth. Wait. . . . The bobber comes to rest. It's twitching tells us we're still in business. Suddenly it moves, now with purpose and determination, off through the weeds. Now pull. The first return pressure tells us this one is nothing to brag about—certainly not big enough to join the 14 inch largemouth and the 19 inch pickerel already hung on the stringer.

Swiftly the fish is brought to the side of the boat and hoisted aboard. A nicely proportioned and colored largemouth bass about 10 inches long. A firm twist releases the hook from the side of the mouth and the fish is gently returned to the water.

July marks the beginning of fine night fishing in Pennsylvania. Trout fishermen going out now are concentrating on big fish. Lunker browns that spend the major portion of the daylight hours resting and well hidden, are cruising about in search of food. The abundance of the night hatching Stone Flies and the Dobson Fly (Helgrammite) plus the larger terrestrial insects that fall into the water, like moths, crickets and grasshoppers and an occasional young bird, mouse or frog that enter the water make it necessary to use big flies. Sometimes even plugs or bass bugs.

On Pohopoco Creek in Carbon County years ago I witnessed probably the oddest method of taking fish that I've ever seen. Two spin-fishermen stationed themselves one on each side of the big hole, 200 yards downstream from the covered bridge. A live mouse was attached to the line of the one fisherman who was using eight pound test line. Two sets of #8 treble hooks were used. These were not impaled in the mouse but tied on with light thread. The other fisherman also attached his line but with a real light tippet. Dropping the bait in the water they reeled it back and forth across the pool in a swimming manner. Doing this, they covered every inch of the length and breadth of the pool. I never saw a fish take this rig but the anglers claimed that when one hit, the light tippet on one line broke and the other fisherman was fast to a trout or bass that didn't need to be measured.

Top target for July fishermen is the smallmouth bass. Pennsylvanians are fortunate in having excellent bronzeback fishing all across the Commonwealth. One of the best waters in the state if not the entire United States for smallmouth is the Allegheny River from the upstream limits of commercial navigation, two miles above East Brady in Clarion County to the Kinzua Dam in Warren County, a distance of about 130 miles. The Allegheny doesn't have to take a back seat to any body of water.

Said to be "ounce for ounce, the fightingest fish in the water" the smallmouth gorge themselves on the prolific crayfish populations of the Allegheny. Warming waters and heavy feeding have caused these crayfish to grow too big for their shell. When the hard outer covering orexo-skeleton is first shed, the crayfish, referred to as soft-shells are as soft as mush. Others just starting to split their shells are called "peelers." The uncovering of these can be completed by hand. Crayfish remain effective as bait until the hardening process is completed. Collect your soft-shells at night along the shoreline using a dim light or one covered with a piece of red cellophane. Like pie and ice cream to the kids, soft shells are a treat to all fish. Carp, suckers, catfish, rock bass, walleye and the pike all relish them and a mixed catch is a probability this month.

This entire stretch of the Allegheny also has excellent walleye and musky fishing, plus some northerns. Trout are picked up fishing near the mouths of feeder streams and rock bass, bluegills, bullheads and channel catfish are plentiful too. An occasional flat head catfish in the twenty pound plus class is taken from one of the deeper holes. No matter how you fish it—from a boat, from the shore, or wading—plan a fishing trip to the beautiful and productive Allegheny River in July.

ATTRACTIONS IN PENNSYLVANIA SEEM ENDLESS. FROM THE RAPIDLY DEVELOPING KINZUA AREA EAST TO THE LONG FAMOUS POCONO MOUNTAINS, SOUTH TO THE FASCINATING DUTCH COUNTRY AND WEST TO THE GROWING RECREATION AREAS IN SOUTHWESTERN PENNSYLVANIA'S MOUNTAINS, TOURISM IS BECOMING INCREASINGLY IMPORTANT TO THE COMMONWEALTH'S ECONOMY. AS ONE WHO ENJOYS PENNSYLVANIA'S MANY RECREATIONAL BLESSINGS YOU MIGHT BE INTERESTED TO KNOW MORE ABOUT . . .

the tourist trade



by

BONNIE HOCH
Bureau of Travel Development
Department of Commerce

pictures

HARRY EWING
Department of Commerce

NEXT TWO PAGES >>>

EACH YEAR thousands of people visit Pennsylvania's many tourist attractions. And the art of candlemaking is just one of the things you may discover if you visit such popular summer activities as the Kutztown Fair.





CAMPERS TAKE TO THE WOODS when summer settles over the Keystone State and the money they and their children spend for everything from candy to cars has a gigantic impact on Commonwealth economy.

the tourist trade

PENNSYLVANIA IS THE EXCITEMENT STATE for beautiful scenery, historic attractions and interesting activities. No other state offers such stimulating diversity for old and young alike. Half the United States resides within a 500 mile radius of Pennsylvania and all her beautiful spots may be reached via more state highways than all of New York, New Jersey and New England.

As a result, Pennsylvania has mushroomed into a giant tourist mecca. Last year more than $3 billion dollars were spent by travelers in Pennsylvania, making the tourist industry the second largest in the state with manufacturing ranking first and agriculture third. These tourist dollars obviously create a favorable, dramatic impact on the state's economy.

It has been estimated that for every $10,000 spent by tourists a new job is created. At this rate the three billion dollar impact figure would mean through tourism there have been created at least 30,000 jobs in the state.

In the course of a normal day of traveling, studies show that a couple spends about $35. And each dollar spent in



an area is shared by several different types of businesses, including food and housing services, banks, utilities, farms, stores, shops, auto services, insurance companies, professional men, and sooner or later, nearly everyone in the community is affected.

The tourist dollar can be broken into percentages showing exactly how and where it is spent to add to the state's revenue. For instance, 27 per cent goes for food, while 17 per cent is spent on lodging facilities. Auto expenses make up 19 per cent of the tourist's spending and 16 per cent is spent on attractions such as theaters. Personal services and retail purchases account for 21 per cent.

This impact could also be demonstrated in other terms. For instance, last year the National Association of Travel Organizations (NATO) says tourists in Pennsylvania consumed 2,500,000 hogs; 531,000 steers; 14,000,000 chickens; 26,000,000 quarts of ice cream; 201,000,000 loaves of bread; and all the potatoes, apples and peaches which can be grown on a 44,000-acre farm. In addition, $150 million were contributed to the state's sales tax funds from lodging facilities alone.

Who ate all this food? Studies indicate the average size of the traveling party in Pennsylvania averages 2.7 persons and the average length of stay in the Keystone State is 2.2 days. Travelers who make use of campground facilities stay an average of three days and spend approximately $27—outside of camping.

The year 1968 set a new record for the impact of tourism on the economy of the state. Factors were much more favorable for tourism, due mainly to the improved weather conditions, less social unrest, fewer strikes and no competition from Expo 67 as was the case in 1967.

Responsibility of promoting Pennsylvania as a vacation and recreation state is placed with the Pennsylvania Department of Commerce Travel Development Bureau.

Function of the bureau is to attract out-of-state visitors and keep the state's 12 million residents informed about "What's happening" recreationally in the Keystone State. The successful promotion of Pennsylvania in this respect has enabled this state to enjoy a dramatic upward surge from a revenue—and tax—standpoint, as well as provided increased employment for Pennsylvania citizens.

The bureau accomplishes this mass dissemination of information with commercials for radio and television, advertisements for national and regional magazines and metropolitan newspapers; publicity stories, promotional photographs and motion picture films. The bureau has at its disposal several five-minute films which are used to expose the sights and sounds of Pennsylvania to members of clubs, church groups and other organizations.

In addition, tourist information centers are serviced and operated by the bureau at Bedford, Zelienople, Neshaminy, the Highspire Service area and the new Sideling Hill center on the Pennsylvania Turnpike in addition to one at Delaware Water Gap. These centers are open from 8 A.M. to 8 P.M. to furnish free literature on things to see and do throughout the state. Representatives are there to answer questions on places to visit in Pennsylvania.

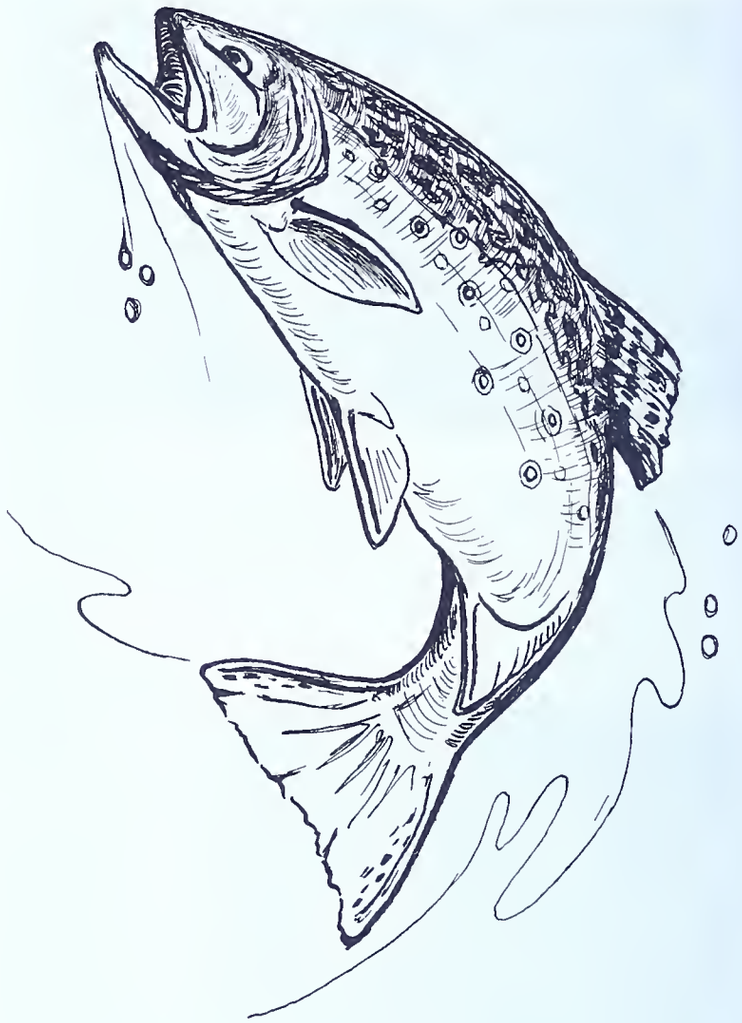
Specific brochures as well as news releases are also printed and promoted by the bureau. Brochures produced by the bureau and available free to the public include Discover the New Pennsylvania; Pennsylvania Golf; Pennsylvania Ski/Excitement; Pennsylvania/Excitement; Meet Pennsylvania; Pennsylvania Government; Pennsylvania Emblems; Pennsylvania Religious Traditions; Flaming Foliage; and the quarterly Calendar of Events. The Bureau of Travel Development also handles the development of research materials for the public and private sectors of the travel industry.

Like more information on what-to-do recreationally in Pennsylvania? Contact: Travel Development Bureau, Department of Commerce, Harrisburg 17120.



A BARGE RIDE may be the closest some visitors to Pennsylvania get to enjoying our watersports, but many find some of their summer fun by boating or fishing our lakes and streams while a visit to the zoo (above) will be a moment long remembered by the younger set.

Creature of Ephemeral* Existence



by *CLARK SHIFFER*, biologist
Benner Springs Research Station

On July 22, 1909, Mr. R. C. Lange and a companion were camping on the shores of the Meramec River in Missouri. About 8:30 that evening as they sat about a brightly burning campfire they noticed something falling into the flames. The sound made by the falling objects was compared with that made when a burning match is dropped into water. The sizzling noise increased as the objects dropped into the fire with increasing frequency. In less than five minutes the blazing campfire was extinguished. The odor of burning grease filled the air. A coal oil torch was lit and the two stepped into their boat. The bottom of the boat was quickly covered to a depth of two inches by the falling objects. The next day some fishermen camping on a sandbar related to them that their campfire had also been extinguished about 9:00 by the same falling objects.

At various times accounts similar to the above appear in journals, newspapers, etc. Sometimes the numbers of these objects almost staggers the imagination. About the shores of the Great Lakes, in past years, so many of these objects piled upon streets, vegetation, bridges, and various other objects that they formed piles several feet thick. Traffic over bridges and roadways became extremely hazardous. In every case the objects were attracted to artificial lights of every description. The objects always appeared in vast swarms which abated almost as suddenly as they appeared. The swarms were often likened to falling snow, even though they only appeared during the warm months.

The preceding accounts concern a most unusual and interesting insect. It is variously known by the names mayfly, shad fly, willow fly, cisco fly, trout fly, day fly, spinner, drake, dun, mackerel, and cob fly, among others. It is one of the most ancient insects on earth, with many fossilized forms. There are about 1,500 species world-wide, with about 550 species in the United States. Fishermen in general, and fly fishermen in particular, are familiar with it, since many artificial lures are imitations of the adults or nymphs.

Life for the mayfly usually begins in the form of a tiny egg, the surface of which may be sculptured or covered with strings or nodules. These decorations serve to gather silt, thus rendering the eggs inconspicuous. They also aid

*** From the Greek word Ephemeros, meaning "lasting but a day."**



in keeping the eggs attached to rocks or underwater plant debris.

The eggs hatch after an incubation period ranging from slightly more than a week to a month or more, depending upon water levels and temperature. The tiny creature that makes its way from the egg is known as a nymph or larva. It is possessed of three body parts common to all insects; the head, thorax, and abdomen. At the tip of the ten-segmented abdomen are three tails. (Some kinds have only two tails.)

As the nymph grows it changes its form many times. The old skin is exchanged for a new one in a series of molts. After the first molt tiny gills make their appearance. These increase in number until there are, in the mature nymph, seven pairs arranged along the sides of the abdomen. Two large eyes composed of many smaller eyes and three separate, single eyes develop on the head. Four wings develop upon the back of the thorax.

The nymph feeds upon tiny plant life present in its watery world. It may be compared to the larger, more advanced plant-eating animals which serve as food for the meat-eating animals. Many species of fish find mayfly young excellent eating. In fact, many young fish may feed almost entirely upon the nymphs.

When the time for the emergence of the adult draws near, the nymph ceases feeding. This is usually about one to three years after hatching. The wing pads upon its back become darker and swollen. Many organs undergo regression, i.e., they slowly disappear.

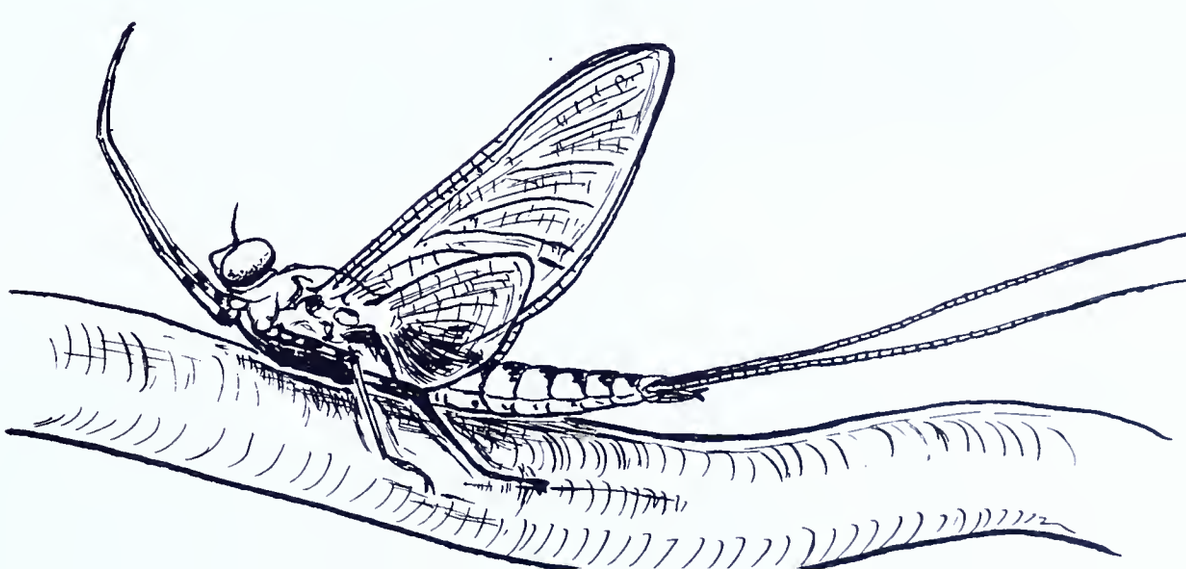
Finally, the nymph either arises to the water's surface, or crawls out onto the bank, up a plant stem or rock, and the adult insect quickly crawls out of the ruptured nymphal skin. This process usually takes an average of ten seconds. Many adults are eaten during this transformation process, or "hatching."

The adult flies feebly to streamside vegetation and there it rests quietly on the underside of leaves. It is called a subimago, or immature adult, at this stage, because it must molt one more time. No other insect molts after getting functional wings except the mayfly. (Some kinds do not go through this molt at all, and in other kinds only the males molt.) The subimago stage usually lasts about 24 hours, but may be of longer or shorter duration.

After the subimago has rested quietly for about a day, it is ready for the last molt. This process is slower, for the wings must be protected against injury. If the wings are injured the adult cannot fly and is then unable to perform its role in life. That role is to reproduce its kind. When the molt is complete the mature adult is known as an imago.

Some imagoes fly as soon as they molt, but most remain quiet for a brief time. The eyes are now much larger and

continued on page 28



MANY SUBIMAGOES, after shedding the nymphal skin, are eaten by fish (opposite page) while angler imitates the mayfly with dry fly patterns (above) such as the March Brown (Stenonema vicarium), the Dark Green Drake (Hexagenia recurvate) and the Ginger Quill Spinner (Stenonema fuscum). The adult mayfly, or imago, often rests quietly with the front legs raised in a characteristic pose (right).

If you're one of the thousands of people who enjoy boating on some Pennsylvania waterway each year then you should . . .

Know Your Boat's Loading Capacity!

by/DEAN KLINGER
Chief Marine Services Specialist

YEAR AFTER YEAR CAPSIZING of boats has been the number one cause of boating fatalities. The major cause for capsizing can be attributed to one thing—*OVERLOADING.* In an attempt to prevent overloading and to educate all boat owners as to how much their boat can SAFELY carry, Pennsylvania passed and adopted the Boating Capacity Plate Law and Regulations which requires all boats under 26 feet in length (except sailboats and canoes), regardless whether they are designed for a motor or manual propulsion, that are built, offered for sale, or ownership is transferred after January 1, 1969, to be equipped with a capacity plate. The capacity plate must be installed where it can be readily seen by the operator and show the following information: that under normal conditions the craft can safely accommodate a certain maximum amount of OBC certified horsepower; the number of persons at 150 pounds per person or a properly located maximum weight in pounds for persons, motor and gear, and the hull serial number. Most of the major boat manufacturers have been complying with this requirement for a good number of years even before it became law.

The most important thing to remember on any boat with a capacity plate is that all calculations give the maximum load or power UNDER NORMAL CONDITIONS. Normal conditions do not include swift water, rapids or stormy weather, so if you must boat under any of these conditions make sure that you are well under the maximum weight capacity and that the load is evenly distributed.

If you own a boat that was built before January 1, 1969, and you have no intentions of selling or trading it but would still like to know the safe carrying capacity for your own peace of mind you can get the approximate maximum by using the following formula for simple design boats. Center line length times maximum width times maximum depth, times 0.6 divided by 12, multiplied by 150, except where beam measurements are 48″ use no more than 19″





as maximum depth; where beam 49″ to 52″, use no more than 20″ as maximum depth; it beam is 53″ to 56″, use no more than 21″ as maximum depth; and if beam is 57″ or over use no more than 22″ as maximum depth. This answer will give the approximate safe carrying capacity in pounds.

In computing any formula it must be remembered to change inches into decimal feet for proper results. (See table.)

A simple method for determining the approximate number of persons a boat can safely accommodate is to multiply the center line length by the maximum beam and dividing by the number 15. For example if you had a 12 foot boat with a 3 foot beam you get the number 36, divide 15 into 36 which gives you an approximate safe passenger guide 2 persons at 150 pound average.

In determining approximate horsepower capacity simply multiply centerline length by transom width (the width at the back of the boat). With the following chart, locate this number on the bottom and then go upwards to where the curve line intersects. This will give you an approximate maximum motor size.

As it was mentioned earlier these answers are approximate. Exact formula will vary to some degree. The important thing to remember is that if a boat feels overloaded it probably is. Operating a motorboat which is either overloaded or overpowered is not only extremely dangerous to you and your passengers but is also illegal and can possibly result in a heavy fine.

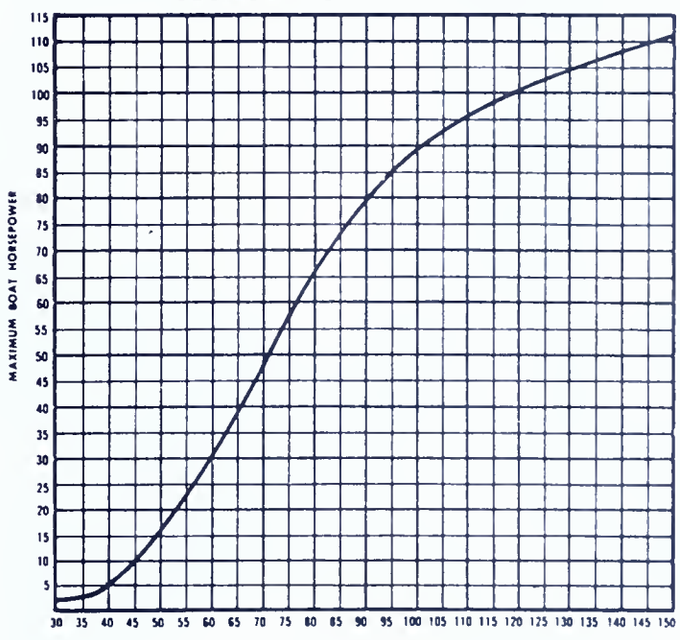
For the safety conscious boat owner who wants a capacity plate for his own protection as well as persons who either build, or plan to sell or transfer the ownership of a boat after January 1, 1969 and are required by law to have them installed, an application form can be obtained directly from the Pennsylvania Fish Commission's Waterways Division (Box 1673, Harrisburg 17120) or from any Waterways Patrolman. The completed application form must be forwarded to the Commission along with a check or money order in the amount of $2.00 per application to cover computing and handling costs.

BOATERS USE all kinds and sizes of boats on Commonwealth waters and whether yours is a graceful cruiser such as the one on the opposite page or something smaller and used only in pursuit of fishing like that above, you should be aware of Pennsylvania's new Capacity Plate regulation. Using a simple formula and these two tables (right and below) you can get an idea of what your boat will carry under "normal" conditions. All boaters are advised to have capacity plates added to their boats, although only those purchased or manufactured after January 1, 1969 are legally required to have them.

INCHES TO DECIMAL FEET

Inches	Decimals
1/8"	.010'
1/4"	.021'
3/8"	.031'
1/2"	.042'
5/8"	.052'
3/4"	.062'
7/8"	.073'
1"	.083'
2"	.167'
3"	.250'
4"	.333'
5"	.417'
6"	.500'
7"	.583'
8"	.667'
9"	.750'
10"	.833'
11"	.917'

OBC BOAT HORSEPOWER CURVE



THE BOYS AFTER THE BIG ONES DON'T HANG UP THEIR GEAR WHEN THE SUN GOES DOWN—THAT'S WHEN THEY UNPACK IT! HERE'S HOW ONE EXPERT CATCHES THOSE LUNKERS MOST OF US NEVER SEE.

DARKTIME TROUT

by
ED SHENK

illustrations/J. R. ROWE



IT WAS ONE OF THOSE SWELTERING NIGHTS in late July. Even the crickets seemed to be panting as they chirped their night song. Sleep was out of the question, I felt as I stepped out the back door of the house, searching, possibly, for just one stray breath of air. The sound I heard reached into my brain and it startled me. I concentrated, and finally heard it again; the liquid noise a big trout makes at night as he sucks in a floating object. Call it the power of suggestion, I suppose, because the nearest trout stream, the Letort, is two miles away.

"Anything wrong?" my wife asked as she appeared behind me.

"Honey," I said "I'm going to see if I can't clobber a big trout tonight. I'll probably be back before daylight."

"You're crazy," I heard her say, "but go ahead." I know the crazy remark was uncalled for because she's had the idea for years that I'm nuts.

It didn't take long to assemble my gear; waders, net, fly rod, two fly boxes and a flashlight. I didn't carry a creel because the kind of trout I hoped to catch wouldn't fit into one.

For years I've known, and outdoor writers have written, that one of the best times for catching outsized trout, especially browns, is at night. In Michigan the boys go about their nightly work with kingsize dry flies, fishing to the sound of feeding browns as they slurp caddis flies off of the surface. In New York State, especially around the Salmon River Reservoir, a big wet Montreal still gets the nod by those who practice this "owl time" art. In my case both surface and sub-surface artificials come into play. I could show you a half dozen flies, wet and dry, and speak for hours on the experiences I've had with each. Like the majority of fishermen I'm not addicted to the sport of night

fishing, but I do manage to practice it enough to claim partial success.

With the exception of flies, leaders and flashlights the night fisherman's equipment differs very little from the tackle of the "not quite so crazy" daytime fisherman. The rod understandably should be powerful enough to withstand the surge of a big trout. I generally use a glass rod in the six foot class, lightweight and a dream to cast with, but with plenty of backbone. My reels are single action with weight forward tapered lines. Leaders can be either level or tapered, but generally no lighter than eight pound test with ten being better. With one exception which I'll mention later there's actually no need for a light leader. Whether or not a big trout can see the heavy leader at night, he tends to ignore it. The wariest daytime browns become a little simpler after the last rays of sunlight have left the water and the gloom of night settles over everything. The fish seem to gulp everything that comes along; floating beetles, minnows, crayfish and even a baby muskrat if the trout is large enough.

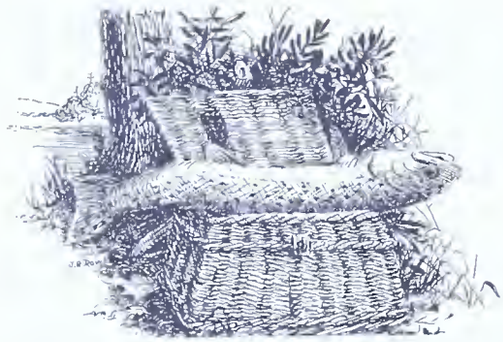
I might mention the one exception as far as fine leaders are concerned. A few seasons ago it was my good fortune to be revising topographic maps in the Millheim area of Pennsylvania, the section containing such fine limestone waters as Penns Creek, Elk Creek, and Spring Creek. Each evening after work I would head for Penns Creek. I slept in the back of the station wagon and generally parked beside the creek at Tunnel Mountain below Coburn. I would eat a light supper and then fish until dark or later. The fishing was wonderful, but as the summer progressed, and the water warmed slightly I found I was catching fewer trout in the daytime and more at night. I could waken anytime at night and hear the slap, slup, slurp of various trout as they surface fed. On quite a few occasions, mainly in the deep slow runs I would fish over rising trout with my proven night flies and never interest them. In desperation one night I shined my light on the waters and noted nothing but tiny naturals riding the surface. I rigged up with a 5x leader and number 18 and 20 black flies and had a ball. It was amazing how a trout could pick out such a small tidbit in total darkness, but on occasion they did it. My best trout on these tiny flies was not as large as the trout normally hoped for in night fishing, but I caught trout up to sixteen inches regularly and one deep bodied eighteen incher. I might add that during the course of the summer I killed only three fish.

One fly was very successful on Penns Creek, and that same fly is my number one lure yet today. I have Don Gapen, the originator of the muddler to thank for the idea of this fly. Actually a big muddler makes an excellent night fly but I wanted one a little bulkier and different so I tied one on a #4 streamer hook. The tail is turkey, body is thick

continued on next page



continued from previous page



DARKTIME TROUT

black wool rubbed with gold tinsel and palmered thickly with three black hackles, wing is a heavy mixture of black and white bucktail and the head is the clipped bucktail head similar to that on the muddler. The first night I fished this fly I raised ten trout, landed four. At one pool I kept hearing the splash of a kingsize fish and was trying to locate him in the darkness. I kept casting the night muddler and letting it drag across stream on a short line. There was a tremendous splash and my reel began to scream like an injured banshee. If I remember correctly this fish cleared the water twice, falling back with a sound not unlike Uncle Louie slipping in the bathtub. Finally the runs became shorter and slower and I felt the little lump as my line-leader connection passed through the tip of my rod. I turned on the flashlight to look at the shimmering monster at my feet. "No trout could be that big," I gasped, but there he was too tired to resist much longer. Slowly I eased the net into the water an inch at a time, I adjusted my light so I could watch the fish, I saw the fly attached to the trout's mouth by just a tiny bit of flesh, and I watched horror stricken as the flesh gave way and the fly flew into the air. A feeble flip of his tail and the monster sank from sight. How big? I guess I'll never know. I never hooked or saw him again.

What happened to that sweltering July night? I'm coming to that. I decided against the Letort, so drove six miles more to a spot along the famous Yellow Breeches Creek. I had already tied a big night muddler to the end of the heavy leader, since use of a light of any kind will usually spook the trout for a while. I slowly eased into the head of a long pool and the coolness of the water felt through my waders was just about the most refreshing thing in the world. I stood hip deep in the water waiting for my eyes to become accustomed to the dark, at the same time listening for the tell tale sounds of a feeding trout. I heard the melodic song of the crickets, and on the ridge behind me a fox broke out with a "yip-yip." I finally heard the sound I was waiting for. With a false cast to lengthen my line I sent the big bug out through the darkness. It floated dragless for a moment and then I could see the tell-tale wake as the line tightened and the current dragged the fly below me. One cast, two, then ten. I lost count and was just about ready to try another pool when there was a sudden flurry in the water to my left. A quick cast in that direction must have been on target because there was a slurp, my rod whipped forward and something was tailwalking all over the pool. The fight was over shortly and the trout, about sixteen inches was released. Sometimes it's best to keep fishing one pool while night fishing, but I had the wanderlust and the memories of good fish in nearby pools, so I proceeded downstream.

The moon was apparent through the trees, but wasn't bright enough to affect the fishing. A bright moon sometimes keeps the trout from feeding but fishing the shadows on a bright night can be rewarding.

I eased quietly into the head of the next pool, stood a few minutes and made my first cast. It all happened so quickly that I hardly knew what was happening. A shrill screech of the reel as a heavy one propelled downstream at the end of my eight pound leader. First I was giving line, and just as abruptly the line was slack as the fish turned back upstream. I reeled frantically but was too late. I caught the flash of a huge body as he jumped nearly in my face. I kept reeling but the fish was gone. The sweat drenching my body may have been from the heat, but at least part was from excitement.

I fished a few more holes, caught and released two more trout but didn't see or feel another big fish. I walked back to the car at 4 A.M. and decided to try one spot a few miles downstream before heading home.

I was still using my number 4 "night muddler" with the pinched down barb. Most of my flies are barbless and it doesn't seem to affect the percentage of landed fish. I still lose some fish, but feel that I never lose any more than I do with barbed flies.

This hole was a little different. It could be fished from shore, so I eased down the bank to the water's edge. At least one good fish was feeding, his gurgling and slupping noises plainly audible over the sweet sound of running water. A good dozen casts were fruitless but the unlucky thirteenth cast hit pay dirt. This fish was crazy, thrashing the surface and shaking his head from side to side. Being unable to free himself that way he took off in a mad dash for the far side of the pool. Judging from the amount of line that was out that trout should have been on the far bank. I felt a sickening sawing on the line and remembered the old post sticking in the water. I jumped into the water, finally made it to the far bank and released the line from the post. The trout was still on and after ten minutes more of thrashing, running, jumping and head shaking he was ready for the net. "A keeper" I said aloud, "about 23 inches I'd say."

I wasn't hot any more; a cool breeze had sprung up, the sky was brightening with the first light of dawn. I dismantled my rod, held the trout up to the light to admire it, paused a few minutes to soak in the beauty of the sunrise and headed for the car. I could sleep now.



BUDGET cabin cruiser built by Horace Burgard of York, Pennsylvania, sees use on both the Susquehanna River and the Chesapeake Bay.

THE BURGARD BOYS --and their budget boats

by William Stair

"UM, WELL I DON'T KNOW," I said. Horace Burgard of York, Pennsylvania, was describing a boat he was about to build. He had ideas from all over, one here, one there and I gathered he was about to put them all together in one riproaring masterpiece. It sounded like an awful mish mash.

The next spring I was called to inspect his creation. It was impressive, and it was then I recalled that I had been talking to a seasoned and determined boat builder.

I beheld a trim roadable cabin job with an unusual power application. Each side had a wash board from stem to stern to keep bait cutting and other mess outside the boat. The cabin had a jaunty forward pitch and water taken aboard drains down the foredeck and overside at the low point of the wash boards. Aft was a self draining fish box and cooler. With a crank in the cockpit you could winch the anchor up or down without scrambling forward to handle a lot of slimy line. The cabin was spartan but adequate considering the space available. The sharply flared sides of the hull gives it a built-in urge to fight capsizing. The power plant is a 10 h.p. outboard which drives it all day at eight knots on five gallons of gas. A vent pipe with fan draws off fumes from the motor well. Protection from the sun is furnished by a cabin overhang. Visibility is good forward but just in case you get nervous in pea soup weather there is a sliding hatch in the overhang for 360°

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BUDGET CABIN CRUISER
—Specifications

The designer thinks the average home workshop fan can build his boat. Materials are readily available. Exterior grade plywood is used for hull. It is treated with a sealer, then Marine Hull and Deck paint. Bronze ring nails used for all fastenings. Resourcenel (Elmers) water proof glue used throughout. A minimum of inside framing was made from laminated spruce. Seat attached to front of engine well acts as structural member. Length over all, 22′: beam, amidships at top 80″. Beam at bottom 40″. The sides have an angle of 50° amidships. The stem and stern is also raked at this angle: Boat has rocker bottom of 4″ with two skegs: Draft 5½″ plus prop housing: bow and stern 18″ higher than center: Transom is 20″ wide at bottom and 40″ at top. Bottom is ¾″ plywood. Each side cut from 4′ x 8′ plywood sheets, ½″ thick; cabin ¼″ thick: cabin walls come to foredeck, leaving space inside for bunks and lockers. Cabin dimensions are 78″ long, 63″ wide, 60″ high at rear, with forward draft of 6″: cabin doors made in halves that fold up and down to avoid swinging doors. Engine well measures 18″ wide, 22″ long with the well transom raked back 45° to escape a blunt entry into the water and allow propeller to be raised enough to clear weeds, etc. from inside. Outside dimensions of well rectangular, forming small wedge shaped locker. Stainless steel baffles around sides of well to prevent water surge. Flexible sheet, (truck tire flap) under powerhead to contain exhaust.

Location of front end of well, 7′ from stern which puts it just aft of amidships for steerage without a rudder. Exhaust pipe also serves as cabin overhang support: exhaust assembly on top of vent pipe is made from auto exhaust pipe extension. Assembly includes a 2¼″ model airplane propeller driven by a 12 volt electric train motor manufactured by Pitman Mfg. Co., Saginaw, Pa. Wash boards are 6″ wide made from laminated strips 1″ rails and scuppers at low point. Other equipment include compass, transistor marine radio, small depth finder, fire extinguisher, flotation gear, repair kit, bow and stern running lights, two 6 gal. fuel tanks under seat and stove.

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BURGARD BOYS - -

visibility. It has the sweep and shear of a good sea boat and a shallow draft. In short, after three years of use it has proven itself on the swells of the open Chesapeake yet has navigated some of the more shallow reaches of the Susquehanna with equal ease.

When Burgard starts to build something, he seems to start off with fundamentals. First, he does not see eye to eye with contemporary boat design. They are, he says, short changing the average guy which also includes the average pocketbook.

Boats, he feels, are getting too big, boxy and far too expensive. They have, he contends, a lot of unused space and excessive power for leisurely cruising or fishing, and what grieves iconoclast Burgard most is the fact that they are looking less and less like boats.

"I wanted something you could drop in the water where the fish are biting, doesn't cost much to operate and should have overnight accommodations. I aimed at just under $500 for the whole thing including the trailer and that's just about what I got."

His finest hour must have been one day when a cabin cruiser pulled along side and somebody in a natty yachting uniform yelled down.

"Hey mister, that thing looks like a boat should look."

Since this authorative view came from the bridge of a plush forty footer, Burgard thanked him and allowed as how his wasn't so bad either.

With all of his many projects, Burgard carries everything in his head without making any drawings and they always seem to work out. Watching him paint the water line on the boat I asked how he knew where it should be.

"Should be about here," he reflected and when the boat was put overboard for the first time with full gear and a crew of two for a weekend, just a hairline of red antifouling paint showed above the water.

This was not the first time he gambled time and money to prove his ideas. Some years ago he was watching a motorboat race and thought he had an idea to make them go faster.

"Can't be done," said the experts but Burgard went ahead and did it anyway. The results were nearly fifty trophies including a first place in the President's Cup Regatta plus two national and international records that still stand.

The key to his success was an advanced concept that manipulated weight and wind so the hull was airborne except for two spots about the size of a grapefruit half



THE sternwheeler (far left) puffing along on the Susquehanna was built by Dick Burgard for about $3,000. Construction of "cabin cruiser" (left) and finished product (right) show simple, but jaunty design. Total cost—about $500 (including trailer)!



and the bottom blade of the propeller. Coupled with this was an additional trick that made it stay that way. If a wave lifts the bow at racing speeds a boat suddenly thinks it's an airplane wing and the driver is apt to find himself in a seriously uncomfortable flight attitude. The winning features of Burgard's racers were their ability to get into planning position fast and stay there.

But not all was easy sailing at first. He had to learn the tricks of the rough and tumble racing circuits. For fast starts he learned how to "walk" his boat, a precarious position that has it reared up on its transom like a bucking horse, fluttering from side to side while accelerating into the semi-airborne position. A delicate touch is required here as too much throttle will flip it one way and too little the other. One time at Lock Haven he was roaring down the approach to the starting line when some neophite competitor hove to, broadside, directly across his bow and only split second timing avoided a shattering collision.

During the heyday of his racing career he used to enter about seven contests a season. In addition to Lock Haven he has raced at Sunbury, Harrisburg, Goldsboro, Long Level, the Schuylkill, Havre de Grace and various other points in Delaware, Maryland and New Jersey.

When it comes to building things Horace and Dick Burgard are like two peas in a pod. One way or the other they have always had some project in the works. In the early years when financial pickings were slim they pooled resources and talents. Later, as the more affluent society took shape they followed their inclinations more separately.

Boats they have built, or rebuilt over the years include a wooden houseboat, a whaleboat, snipe and a penguin which they had at Long Level. A familiar sight for many years on the river was their 25 foot sloop Ranatowa, which, loosely translated (no pun intended) means an Indian maiden without any visible means of support. For several years they also had a steel hulled cabin cruiser they kept at Annapolis, Md. During all this an outboard rig was always at the ready for a quick trip to the Conewago or Susquehanna for bass plugging.

Har Burgard and his brother Dick have always been business partners. Their first venture in the early 1930's was 15 dollars worth of model airplane supplies set on a card table. It quickly matured into a marine dealership and repair depot which lasted for 25 years. For a while they had a small plant where they manufactured boats and made custom accommodations to other boats.

Later they turned to the more lucrative field of construction machinery rentals. Their mechanical sagacity sometimes stands them in good stead. One time they were interested in a slightly used piece of equipment worth about $23,000 but was balky and nobody seemed able to fix it up. They offered $1,000 for it but the banker told them the scrap steel was worth more than that.

"Well, we have to gamble that we can fix it and everybody else has failed so far."

After some haggling they agreed on $1,600. Dick cut a pin off the timer, revolved it 90°, installed a new pin and it has been purring like a kitten ever since.

Horace's present project is a home made airplane. When chided about such an undertaking at an age when more sedate activities seem to be the thing he summed it up characteristically.

"Well, the bird will be a seaplane and I can get to more fishing spots faster."

This is not the first home made airplane. Dick built one in the early 1930's but a law was passed prohibiting home

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SHADES OF THE WRIGHT BROTHERS! Current project is a home-made seaplane (left). Above "Har" at the controls of the final racing boat he built. Its unique design helped him set national and international records.

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BURGARD BOYS - -

made flying contraptions and he had to scrap it. Maybe it was just as well. "With the throttle wide open it might have developed 25 horse power," he recalls. A rib from this old plane is now in an aeronautical museum in the midwest.

At an early date Dick also built an open spark radio transmitter, which, he reminisced, could be heard further with the windows open than it would transmit.

Dick feels that his most rewarding achievement was a stern drive paddlewheel welded steel houseboat which is still kicking up a sedate rooster tail as it chuffs about the Susquehanna after 15 years service. It is 32 feet by 9 feet with a step down cabin. It has bunks, galley, head, picture windows and a sun deck. Steering is conventional from the pilot house or you can loll on the sun deck and steer it with a two station pushbutton on a long flexible cord. The 30 h.p. engine, mounted athwartships, turns the paddlewheel at a splashing 60 rpm's. It cost Dick under $3,000 to build and he figures the nearest factory built equivalent would run about $15,000. Unaccountably, one time, a picture of it showed up in the Mainchi News, a daily newspaper in Japan. (A friend in the military service saw it and sent him a copy.)

They seem to have inherited much of their love of the Susquehanna. Their late father "PY" Burgard always had one property, and sometimes two, at Long Level. The boys have continued this tradition to this day.

"I was hooked on the water since I was a pup," Horace mused.

For many years, Har and C. C. "Doc" Bleecker, venerable and revered ex-physical director of the York YMCA, would make an annual pilgrimage to some spot or other that captured their imagination. One of them was Nova Scotia and at the drop of an anchor they will tell you about the reversing falls, the forty foot tides, the giant tuna of Soldiers Rip, the Grank Banks schooners and their contention that Nova Scotia is the only place where you can still find wooden ships and iron men.

Somewhere, in a vest pocket of his mind, Horace stored away the graceful sweep of the Grand Banks dory that can navigate on their treacherous North Atlantic fishing stations with a 4-5 inch freeboard when loaded with cod fish. After twenty years he revived these seaworthy lines which you now see on the boat described in the first part of this article.

The biggest boat he was ever on was to visit a high school buddy who was attending Annapolis and was just getting his sea legs on one of Uncle Sam's big battlewagons. Today, York Countians will know this young midshipman as battle scarred Rear Admiral Edward E. Grimm, who recently sat on the board of inquiry looking into the Pueblo disaster.

For many years Horace was sort of a commodore in charge of maintenance of the fleet of about twenty-five assorted boats of the York YMCA Camp Minqua, above the Holtwood dam. Yorkers who attended Minqua from the early 1930's until its recent disbandment will remember the two Synge's used to haul the youthful campers on sight seeing tours. Synge One was a half sunken hulk in the Chesapeake Bay which he and Doc Bleecker raised and brought to camp, including a hoist over the two dams Synge Two was a whaleboat which he converted.

While Long Level was always his berthing spot, quiet tidewater ways cast a spell on him and he is intimately acquainted with the Maryland Eastern Shore. One time, he recalls, after a day of fishing they sacked out on the loading platform of a tomato cannery warehouse. As the cool of the evening wore on the tomato cans contracted, snapping in the top with a resounding "boing." He viewed the resulting tinny clamor as something less than ideal music to go to sleep by.

"Har" Burgard has always had an intense curiosity about any natural phenomena and his knowledge of outdoor lore has gained him a reputation as an amateur naturalist and biologist. For the past several years he has distributed about 700 pounds of corn each winter to wild ducks at Kiwanis Lake, near York—a few goof-offs who stay there all year round.

The urge for the outdoors runs strong and if civilization becomes too stifling he will pack up and head for some nook and cranny of nature. His latest expedition was a trip to Alaska where he caught an ocean run salmon and learned the fine points of mushing on the Arctic tundra. A deer camp in the wilds of north Canada also held his attention for a few years. If he cannot find a companion for spur-of-the-moment sojourns he will go by himself. A few Januarys ago he loaded up his cruiser and launched it in the Chester River for a weekend jaunt all by his lonesome. The next February the natives of Hoopers Island, in the boondocks back of Cambridge, Md., shook their heads sadly and tapped their temples meaningfully as they watched him fishing in the tidal flats.

And so it goes with the Burgard brothers of York, Pennsylvania, as they carefully fashion wood, plastics and metal to bring their dreams and visions to reality.

What is next on the program? Horace says it will be a 35-foot version of his present boat except that it will be a true double-ender. Among the innovations he contemplates is a single engine driving two propellers through twin hydraulic transmissions. Will it get built? We are willing to bet on it but we feel it will help if he follows instructions for a change as he continues with his home-made airplane.

THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

FABRIDAM

NORTHUMBERLAND AREA BOATERS are in for a treat this year—more water and a much larger boating range—provided no unforeseen problem occured in recent months.

Bigger boating conditions were brought about with completion of the Susquehanna River fabridam, a long sought after project, at Sunbury.

Actual construction of the fabridam began shortly after mid-1966 but it was not until last March that the final nylon and neoprene bag was installed and tested.

Completion of this project had been anticipated months before it came about but the project was plagued by labor



ENGINEERS and a workman inspect the last of the inflatable bags which make up the Susquehanna River fabridam at Sunbury. This last bag, installed on the east side of the river, was inflated and tested early in March.

problems where the bags were fabricated and unnormally high waters which washed out coffer dams.

Located about 2.5 miles south of the confluence of the west and main branches of the Susquehanna River, the fabridam will provide plenty of water even for those areas which, in past years, threatened the unwary boatman with a sheared pin, or worse, if he unknowingly ventured into the shallows.

It will impound the water from a drainage area of 18,300 square miles and create a pond of about 3,000 acres extending six to eight miles up either branch of the river.

UTILITY PLANS IMPROVEMENTS

Improvements to one of the first public access areas on the lower Susquehanna River, in southern York County, were planned for the current boating season by the Safe Harbor Water Power Corp.

It was quite a few years ago that this utility constructed the first free public access on Lake Clarke and it's been put to extremely good use since then not just on weekends but practically every day in the week.

Since then, as an added attraction, Safe Harbor has converted several acres of woodland, a short distance upstream, into a picturesque picnic area with plenty of parking space for fishermen and family gatherings.

For the 1969 boating season the utility has turned its attention to improving the facilities at the launching ramp by providing a floating dock where boaters can tie up their craft for loading and unloading purposes only.

Of aluminum construction the dock will feature two walkways leading from the shoreline to a 60 foot long floating span buoyed by a series of aluminum drums.

As previously mentioned the ramp has always been heavily used but there has always been the problem of loading and unloading.

Thus the new dock will be an asset to the launching area and will, no doubt, encourage much more use on the part of the general public.

POTENTIAL TEACHERS TAUGHT SEAMANSHIP

A group of Millersville State College students were among the audience when the Susquehannock Power Squadron began its small boat handling classes this year.

This time the course, held on campus, represented a cooperative venture between the squadron and the Earth and Science Department of Millersville State College.

The potential teachers taking the course were members of the oceanographic studies group taught by Prof. Bernard L. Oostdam who is in charge of the college's Marine Science Center which operates from the former U.S. Coast Guard station at Lewes, Delaware.

It was Dr. Oostdam who suggested this cooperative action in view of the fact that oceanographic studies relate to both marine biology and marine geology. Students in both fields operate boats owned by the college and equipped for field studies including diving for exploration and sampling of the ocean bottom.

This form of activity requires a working knowledge of seamanship and safe boating for the protection of all persons involved and although Prof. Oostdam, a former midshipman in the Royal Netherlands Navy, provided his students with training in the rudiments of boat handling and safety afloat, he felt the course provided by the power squadron could supply these necessities thus leaving him free to pursue the oceanographic studies.

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Notes FROM THE STREAMS

illustrations by Paul Sowers, Allegheny County Waterways Patrolman



FLYING TROUT

■ We know the moon isn't made of green cheese and there is doubt as to whether a cow ever jumped over it—but would you believe that brown trout can fly? I was patrolling Bradys Run Lake on a cold January afternoon when a fellow said, "If you had been here a little while ago, you would have seen a funny one!" "How's that?" I asked. Very excitedly the fisherman replied "This guy was fishing through the ice with a minnow and decided to lift the bait for a quick check. The bait was about six inches above the ice when a brazen brown trout came flying close behind and finished a poor second."—***Waterways Patrolman DONALD PARRISH*** (Beaver County).

NONE YET!

■ During a pre-season stocking at Raccoon State Park Lake, a man standing next to a friend holding a small boy said "See those are what your daddy goes fishing for all the time." The boy's mother overheard the comment and exclaimed "Ha! we've been married five years and I haven't seen a fish yet."—***Waterways Patrolman DONALD PARRISH*** (Beaver County).

NON SWIMMERS?

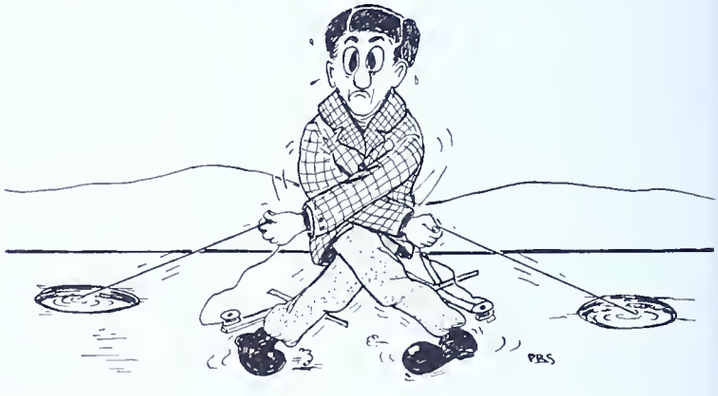
■ During the pre-season stocking of Chest Creek, one stop was along a section of stream that was ice covered. Someone had cut three holes in the ice in order to get the fish into the stream. These holes were about ten feet apart. Boys from the area were helping with the stocking and dumping the trout in the hole nearest the truck. One man didn't approve of this, and said, "Don't put them all in the same hole!" Some people must think trout can't swim.—***Waterways Patrolman ANTHONY MURAWSKI*** (Cambria County).

WASH AWAY GARBAGE—

■ Sometimes it gets a little hard to keep calm and not really tell someone off. While stocking a stream in Blair County last spring, I mentioned to one of the residents about the litter that was thrown in the creek at or near almost every home. This man's answer was that I shouldn't worry about the cans, paper and garbage, because when high water came it would all wash away. With thinking like this it is hard to keep calm and hard to understand the thinking of this kind of person. I'm considering taking this stream off the stocking list and having the fish transferred to a stream where the landowners will appreciate the fact that the Fish Commission also appreciates having CLEAN STREAMS!—***Waterways Patrolman CLOYD W. HOLLEN*** (Blair County).

HATS OFF TO CO-OPS

■ Recently while accompanying Mr. Robert Brown on a Cooperative Nursery tour, we were impressed by the many more and much nicer fish we saw as compared to previous years. All in all these clubs are doing an outstanding job—fishermen and all lovers of the outdoors should take their hats off to these clubs. May they keep up the good work.—***Waterways Patrolman SAMUEL W. HALL*** (Lancaster-Lebanon Counties).



HUNGRY TROUT

■ Robert Kinsman of Honesdale had this odd experience while fishing last winter. A tip-up flag went up so he ran to attend the line, giving the fish lots of time to get the bait deep in its mouth. He turned around in time to see another flag go up. This was too much, so he pulled in the fish on the first tip-up, only to find that the fish had swam over and taken the minnow on the other tip-up. Both hooks were firmly in its mouth!—***Waterways Patrolman HARLAND F. REYNOLDS*** (Wayne County).



CHRISTMAS GIFT—

■ Christmas is a good day to learn ice fishing. Ice fishing has increased the last several years and it looks like some people feel that Christmas Day is a good day to learn. This Christmas a call was received at my home wondering if I would come to Shawnee Lake to show several people how to ice fish. The call was answered by my going to Shawnee Lake. Eight people were waiting. We went to Feltons Cove. Within a short time we had five tip ups placed. Two real nice pickerel and one walleye were caught. The visitors said the next time we will have our own equipment and bait, and we thank you for giving us part of your Christmas, it was fun.—***Waterways Patrtolman WILLIAM E. McILNAY*** (Bedford-Fulton Counties).

FIND PEACE

■ One of the Pennsylvania Fish Commission's "Find Peace In A Violent World" posters has found a new place to be displayed. A University of Cincinnati student requested a poster to hang on the main bulletin board at the campus.—***Waterways Patrolman CLOYD W. HOLLEN*** (Blair County).

SALESMANSHIP

■ While visiting issuing agent Mr. Tom Jackson, owner of Jackson's Hardware in Unity, he told me of his method of selling fishing licenses. He explained that if you buy your license on the first day of January, it will only cost you a little over a penny a day for your fishing enjoyment, but as each day passes until you do buy it, the cost of your license raises. Of course a retired person has the real money advantage. He figures this by dividing 365 days in the year into $5.20 (the cost of a license). Now that's what I call a real salesman!—***Waterways Patrolman JAMES R. SMITH*** (Allegheny County).

BIG FISH / LITTLE NET

■ While on routine patrol of the Delaware River, I came across a young man playing this fish. Wanting to be of assistance, I asked him if he had a net. Finding he had none, I raced to my car for my brand new one. After playing the fish for an hour he brought it close enough to shore to use the net. Did you ever try to land a 12 pound carp with a small net? He finally did it and won a Junior Fishing Citation for the effort!—***Waterways Patrolman JOHN W. WEAVER*** (Northampton County).

TEENAGE HELP!

■ There was more interest in the stocking program last spring than I have ever saw in the past. More sportsmen were present at each stocking than ever before. In a number of areas I had help of high school groups and I must say they do an outstanding job. Two of these boys will take a pail of fish and run to and from the stream. In fact they have the fish in the creek while the average person is just getting started. The albino and palomino trout mixed in the loads added a lot of interest as well as the quality of fish being stocked!—***Waterways Patrolman KENNETH ALEY*** (Potter County).

FATHER'S INTEREST!

■ While patrolling Elk Creek in Erie County I came across a young boy with a trout out of season. When I asked the boy his father's name, he told me it was none of my business and his father had nothing in it. Later I found out his father did have something in it. His father did not believe in "Sparing the Rod and Spoiling the Child."—***Waterways Patrolman JAMES R. CARTER*** (Erie County).

"SNEAKY" PATROLMAN SPOTTED!

■ While my son Jimmy and I were patrolling North Park Lake early in the spring I wore a red jacket over my uniform as part of a disguise. Three small boys struck up a conversation with us and I pretended I didn't know much about fishing. But the searching sharp eyes of one youngster observed my uniform underneath, and said "You're a warden aren't you?" I asked how he guessed? He said he saw my uniform under my coat and then had looked in my car and saw my binoculars. Then the one boy said "Boy you sure are sneaky!" But I was thinking to myself that I wasn't very successful if these boys had spotted me that easily!—***Waterways Patrolman JAMES R. SMITH, SR.*** (Southern Allegheny County).



TROUT RETRIEVER

■ Several years ago George Hotalen of Dingmans Ferry purchased a beagle with hopes of making a good rabbit hound out of him. George was unsuccessful in training "Bingo" the beagle, however, all hopes of owning a well trained beagle were not lost. George says that whenever he goes trout fishing. Bingo will lie on the bank of the stream and just as soon as he hooks a trout, Bingo is in the water and within seconds has retrieved the trout.—***Waterways Patrolman MICHAEL BADNER*** (Pike County).

CONTINUED FROM LAST MONTH—

The second important factor in dry fly angling is the presentation or casting of the lure. There are several features to remember here, all of which become relatively automatic as the angler gains experience. These features include the delivery or actual cast of the fly; the type of fly, which is governed by the season or availability of the natural insect being imitated; and the line-of-drift or pattern by which the fly approaches the feeding station of the fish.



TO TROUT *-with love*

by
R. T. TRIMMER

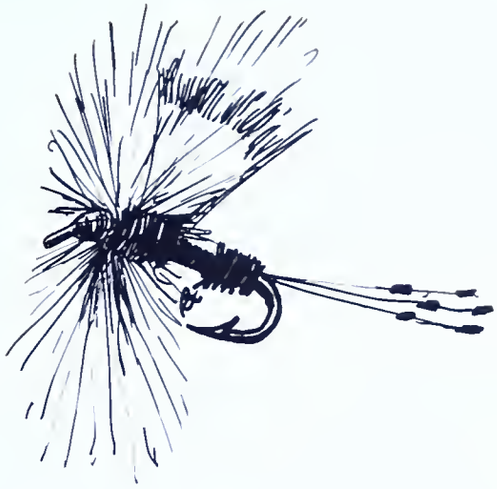
PART II

THE DELIVERY

The variety of equipment which is available to the fly angler is staggering. The fly rod may be anywhere from twelve feet long, as in the ash wood heavy weights used on the big, rough English and Scottish streams, down to the pin weight four and five foot glass and bamboo midget rods now being manufactured here in America.

The purpose of the rod is two-fold. First, it acts as a whiplike transmitter to send the line and lure across a given stretch of water to the point where a fish will consider the fly as food. A little practice will prove that the longer and stiffer the rod, the further will be the cast. However, distance casting is far more important to the tournament caster than to the angler. Most trout fishing is done within twenty-five to thirty feet of the angler's casting position. Thus, distance is relatively unimportant, since most of the fly fishing water in Pennsylvania is well under forty feet across. True, some of the fly sections such as found in Penns Creek may exceed this distance, but a minimum of wading will usually put the angler within reach of his target area. What is far more important is the





accuracy of this cast and this is accomplished only with a rod which is easily controlled and is light enough to allow fishing all day without unduly tiring the angler.

The second purpose of the rod is to act as a buffer and shock absorber, taking most of the strain when a particularly large or violent fish is hooked. For this purpose, the rod must be very springy and resilient, bending easily but with firm support when the fish makes its wild, plunging runs for freedom.

Attached to the very end of the rod butt, behind the angler's hand, is the reel. Here again is a piece of equipment with a two-fold purpose. Primarily, the reel acts as a storage spool for unused line. The secondary purpose is as an auxiliary buffer, paying out line slowly on the longer escape runs of the trout.

Fly line is available in two kinds and three basic styles. Sinking fly line, which is usually used for wet and streamer flies will be of relatively little interest in this work. The second kind of line is, as may be expected, floating fly line. Almost equally popular for wet and streamer flies, and considerably easier to cast and retrieve, floating line is a must for dry flies. Both kinds of line are available in three styles. These styles include: "torpedo" or weight-forward line which is most popular among tournament casters and anglers to whom distance is vitally important; level line, in which the weight and diameter is the same throughout the length, is perhaps the easiest to use, and is certainly the least expensive; and the double-taper line, which is really two lines in one, in that the ends are lighter and smaller in diameter than the center of the line, making it reversible should one end begin to wear.

All three styles have their drawbacks. The level and torpedo lines tend to splash and create more disturbance when they strike the water than does the double-taper, but the lighter casting end of the double is far more difficult to deliver, especially when casting into a breeze. Once again, the choice of equipment is entirely the discretion of the angler. Use whatever works best for you. The only factor to remember is that the weight and length of line should be determined by the chosen rod. A rod cannot cast a line with necessary accuracy unless that line is matched to the weight and spine of the rod.

The next feature to consider is the leader, to which the fly is attached. It is important to remember that the more invisible the leader, the less likely is the fish to see it. This invisibility is accomplished by making the leader as fine as possible, taking into consideration the fact that it must withstand the shock of the fish's strike as well as the tug-of-war that follows.

Leaders are available ready-tied in two styles: knotless, tapered leaders in various lengths, which narrow from material near the same diameter as the fly line, down to almost gossamer half-pound test; and tapered leaders made up of several strands of level monofilament, each progressively smaller until they reach the same degree of delicacy. Many anglers choose to tie their own leaders in the latter style, using their own combination of weight and strand measurement.

It is important to remember that the more delicate the leader tip, the more springy should be the rod, or fly and line will part company with a most discouraging snap.

THE FLY

Now that we are equipped with our tackle, our next problem is the selection of the lure or fly. This section is concerned mainly with the type or species of fly to be used in a particular instance, not with the quality of the fly's construction, though this factor cannot be too strongly emphasized.

The sections describing the entomology of the trout streams dealt mainly with the descriptions of the flies, mentioning their appearance on the streams only in passing. The appearance schedule of the natural flies is of paramount importance in selecting the fly to be used at any given time. Unless the natural insect is available to the fish, they are not likely to recognize the imitation as something to eat and the angler may find himself viewing the tail of a fleeing fish.

Although there are several ways of determining, with fair precision, which species of insect is appearing at a given time, the only sure way is to catch a few of the natural insects emerging from the stream. Matching imitations to this catch will give the best possible results. Perhaps the second best method of finding out which species are available to the fish is reference to one of the many types of emergence tables which may be found in nearly any book on trout angling, a typical example of which may be found in the appendix to this treatise.

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MODERN CAMPING by DEL & LOIS KERR

WATERWAYS CAMPING

WATER SPORTS OF ALL TYPES—boating, fishing, swimming and water skiing—reach their peak in midsummer. July, normally the hottest month of the year in Pennsylvania, sends all of us in search of the refreshing coolness of the water.

With the modern camping supplies now available, it is easy to combine two top-notch activities—boating and camping—for a fun-filled family adventure trip.

Today's tents, a far cry from the heavy, wax-soaked canvas monstrosities of yesteryear, are compact and lightweight enough to easily stow in a rowboat, outboard or canoe. With an outside frame of aluminum or pop-up fiberglass construction, the tent can be set up on shore in a matter of moments. Adding warm comfortable sleeping bags which roll into a tight package, you can be all set for a peaceful night's sleep on the water's edge.

The size of your boat will determine the amount and type of camping gear that you can comfortably tote. If weight is a problem, the ultralight gear and foods designed for backpackers might be ideal. Most of these foods are freeze-dried so you would not have the problem of worrying about refrigeration or the additional weight of cooler and ice.

You could utilize a campfire for all your cooking needs or choose any one of the many varieties of camp stoves now on the market.

Once you determine which equipment best suits your needs and the carrying capacity of your boat, you come up to the big question. Where in Pennsylvania can campgrounds be reached by water?

As many campers are aware, campgrounds in most of our state parks are located a distance from the lake. There are, however, several places in the Commonwealth where it is possible to reach your destination by boat.

The newest and most popular area for camping in sites accessible only by water is the Allegheny Reservoir, better known as Kinzua Dam, in the Allegheny National Forest of Northwestern Pennsylvania. This huge lake covers 12,000 acres.

Five boat-only campgrounds are in various locations along the 91-mile shoreline of the huge reservoir. Morrison, the largest, contains 30 sites and is located between the main "drive-in" campground at Kiasutha and Kinzua Beach.

North of Route 59 on the eastern shore, you'll find Pine Grove with 15 sites, Hopewell with eight and Handsome Lake with ten. The fifth campground is located in the northwestern section. Hooks Brook has 20 sites. Boats can be launched at Roper Hollow, Fishburn, or Willow Bay in the northern part of the lake, Kiasutha or Dunkles Corners in the south or at the privately operated Wolf Run Marina.

Boat campers, of course, must have a pioneering nature. Sites accessible only by boat generally of necessity contain only a minimum of facilities.

The United States Army Corps of Engineers, often permits camping on the shores of their reservoirs in Western Pennsylvania. Most, with the exception of Tionesta and Youghigheny, have no organized campgrounds. Tionesta has a campground on Tionesta Creek below the dam, but this is a drive-in area. You would need to take your boat to the main reservoir for launching.

Pioneer camping (without facilities) can be done on the shore of the reservoir at Nebraska Bridge or on the eastern edge of the lake.

Smaller reservoirs at Conemaugh and Loyalhanna in Westmoreland County and Mahoning Reservoir in Armstrong County do not have regular campgrounds, but the Resident Engineers will generally permit primitive camping. You should contact the Engineer for permission and regulations.

On Lake Erie there are several private campgrounds along the shore which enable you to enjoy both boating and camping.

Another possibility for boat camping is along one of Pennsylvania's scenic rivers. The northern Allegheny for example offers some delightful scenery. There is a large private campground, Cloverleaf, right on the stream near Tidioute which has deluxe facilities. Islands offer fine choice of primitive campsites as do unoccupied stretches of shoreline.

Moraine State Park, under construction near Butler, will have canoe-in campsites when all planned facilities are completed.

It is to be hoped that eventually the Department of Forests and Waters will add primitive camping areas accessible to boats along the shores of some of the larger state park lakes. The popularity of this form of family fun is growing by leaps and bounds.

TIPS FOR HAPPY BOATING

by
Gordon L. Strobeck



A HANDY MOUNTAIN SPRING or the garden hose can be used to fill your boat with water when cleaning to keep things ship-shape. Be sure to loosen and clean dirt before refinishing (below). Here a vacuum cleaner can help.

YOU CAN ALWAYS have a "happy boat;" one which doesn't leak, is shiny and new as when bought. How? Well, just attend to a few long neglected chores.

First, it's always a good idea to loosen up any dirt lying between the boards (strakes) when cleaning. The narrow nozzle of a vacuum cleaner and a small screwdriver are ideal for these jobs.

If a mountain spring happens to be handy, most of the major cleaning—leak-checking is very easy. Just put the boat on its trailer, pull up beside the spring and start "splash-filling" your boat with a plastic bucket. (See illustration.)

When loosening material caught between narrow boards, you may find an ordinary pencil eraser helpful. Carefully clean the loosened dirt and other materials such as sand from your boat either at the afore-mentioned "mountain spring" or by doing it the hard way—by scrubbing the loose paint and varnish on all surfaces, then sanding with fine sandpaper before painting.

Be careful when using sharp tools, of any kind, as these may harm the wood, thus causing leaks. No fisherman or boatman likes a leaky boat, but after your boat is about half-filled with water it's easy to check for these. Also, the "splashing" will have loosened dirt and sand, which have not previously been removed with the vacuum cleaner and hose.

If the chances are balanced in your favor, you'll probably be lucky and will have no leaks! This leaves only the dirt and sand to be scrubbed out before varnishing and painting. NOTE: *GET IT CLEAN!* This cannot be stressed too strongly, for even a tiny bit of dirt can be caught in a small crevice underneath the varnish; holding moisture which eventually can cause the varnish to come loose and the wood to rot.

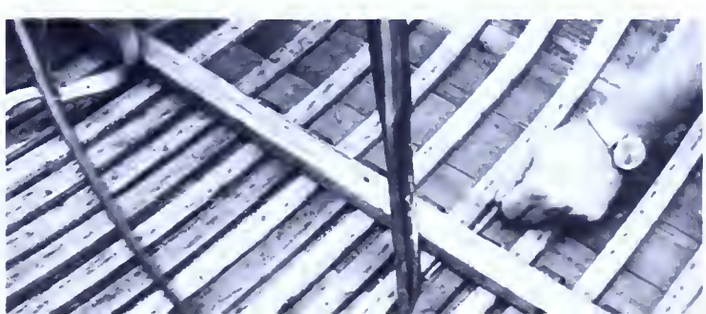
Use a good grade of wax-based paint remover, if your boat needs a new coat of paint—but any detergent is much too strong for the varnished parts of your boat, and will cause the varnish to blister. If you happen to need a new coat of varnish, merely sand the loose varnish with fine sandpaper, and after making sure that the wood is clean, varnish it carefully with a good grade of spar varnish.

In case you've been thinking about getting a metal or fiberglass boat to solve your maintenance problems, take note:

While it is more or less true that metal and/or fiberglass boats need less care, it is also true that a wooden boat can last almost forever—if it has proper care.

And whether you're a fisherman or a yachtsman it's always a good idea to know the small craft gale, whole gale, and hurricane warnings. Carry seat cushions like this one and it won't be long before you'll have memorized the Coast Guard Safety Signals for both daytime and night.

Safety cushions like these can be very important to many boatmen and fishermen, for storms can come up in a hurry and rough water is dangerous. Many state and federal lakes use these warnings, but they are of little use to those lacking the correct knowledge.





TV PROGRAM GUEST

Pennsylvania Fish Commission Executive Director Robert J. Bielo recently appeared as a guest of Harry Allaman on "Call Of The Outdoors," a weekly WGAL-TV program originating in Lancaster. The pair discussed possible fishway construction on the three dams of the lower Susquehanna which presently do not afford any means for the passage of such migratory species as shad and striped bass. Shown as part of the program was a ten minute color film of much larger dams on the Columbia River in Oregon where fish passage facilities permit thousands of fish to daily move upstream.

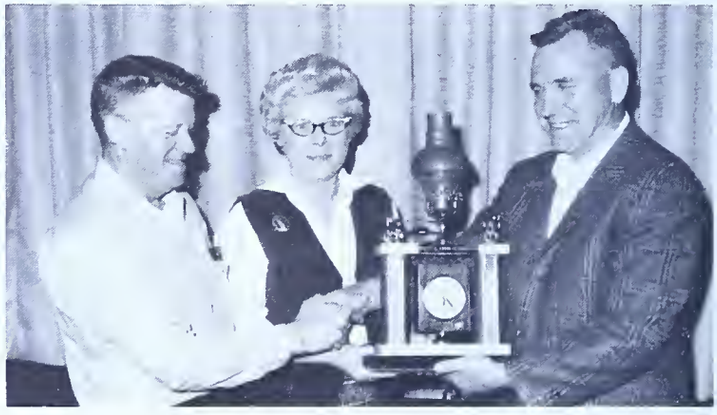
Long standing legislation has permitted power companies operating the Susquehanna impoundments to refrain from building passage facilities in lieu of a token payment of a few thousand dollars to the Pennsylvania Fish Commission each year.

COHO RELEASED

More than 135,000 young coho salmon, or smolts, were released in tributary streams of Lake Erie late in April.

The release, according to Robert J. Bielo, Executive Director of the Pennsylvania Fish Commission, was a continuation of the Commission's program to sustain the coho sport fishery in Lake Erie. The initial release of 84,500 coho was made between April 17 and May 4 last year.

According to Shyrl Hood, Assistant Chief of Fisheries, most of the 135,000 coho smolts, averaging 5-6 inches in length, were reared at Commission nurseries on several tributary streams. They were grown from Michigan eggs collected in the Manistee River during November and December, 1967. The eggs were hatched at the Commission's fish culture station at Corry and fingerlings were transferred to the Lake Erie nursery sites late last summer. One group of 4,000 young coho also released were reared at the 3 CU Cooperative Nursery east of Erie.



AWARD/ SPECIAL WATERWAYS PATROLMAN Charles Pendleton and his wife, Penny, are the 1969 winners of the Delaware County Field and Stream Association's Annual Conservation award. Usually presented to an individual, the trophy this year was given to the Pendletons jointly for their combined conservation efforts. Presenting the award is George Kleig (right) chairman.

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SEA BAG

U.S. COAST GUARD FLOTILLA HONORED

Flotilla 52, of Lancaster, during its Winter Conference, was presented with a trophy and a plaque for being the most outstanding flotilla in the 3rd District.

The trophy was presented by Rear Admiral Thomas R. Sargeant III, Chief of Staff, of the U.S. Coast Guard; while the plaque was given by Rear Admiral M. A. Whalen, Commander, 3rd Coast Guard District, for having made the largest number of Courtesy Motorboat Examinations.

SAFE BOATING—SEASON—WEEK

Since National Safe Boating Week is being observed this month some mention should be made in an attempt to emphasize the importance of safe boating throughout the entire season.

During 1968 there were 72 reportable boating accidents in Pennsylvania which resulted in 30 deaths, 47 persons injured and property damage estimated at $19,800.

Quite a few of these accidents, I'm sure, could have been avoided with the use of a little common sense the lack of which I observed in several instances on the Susquehanna River last season.

For example there was the exhausted water skier who just couldn't stay afloat any longer and had to be rescued, the fellow who made a wide sweeping turn in front of me which required, on my part, a quick switch to reverse; the fishermen anchored at night in a much traveled channel without a light showing, and the jet set zooming past a canoeist and creating a wake large enough to swamp the smaller craft.

SUSQUEHANNA POWER SQUADRON ELECTS OFFICERS

Leon R. Sachs, of Lancaster, was elected commander of the Susquehanna Power Squadron and was installed during the squadron's annual Change of Watch. He succeeds Gerard E. Frailey, also of Lancaster.

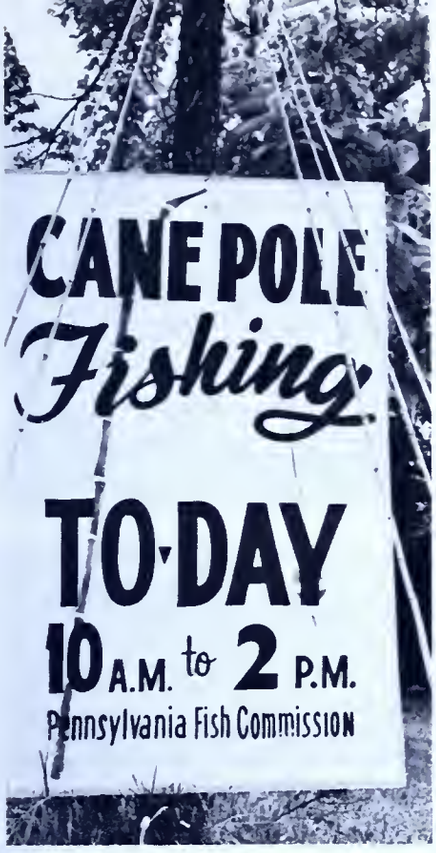
Others elected were: Douglas M. Reinhart Jr., Lititz, executive officer; Richard J. Faith Sr., Chambersburg, administrative officer; Nelson P. Reynolds Jr., Willow Street, secretary; and Ronald L. Wagner, Palmyra, treasurer.

Committee members elected were:

Executive—Walter J. Brewer, Chambersburg; Arthur T. Farmer, Lebanon; Donald F. Neidig, Summerdale.

Auditing—James R. Denison, Camp Hill; Joseph Beatty, Ephrata.

Nominating—Gerard E. Frailey, Earl W. Hill, past commander, New Cumberland; Robert L. Jones, a past commander, Akron.





CANE POLE FISHING

by Steve Ulsh



THE "CENTER CITY CANE POLE Fishing Program" originated by the Pennsylvania Fish Commission last year is again in full swing. Last summer the program, despite a late start, received favorable reactions from many areas. The Federal government, other states, municipal governments, service and charitable organizations have contacted the Commission inquiring as to details of the program. Greatest success of the program however was the enthusiasm of the children who actually participated. They received the greatest benefit of being able to fish—some for the first time.

Originally three sites were used. In Philadelphia the old Torresdale Hatchery ponds, now city owned, were fished daily for a period of six weeks. Almost 5,000 children attended and caught nearly 2,000 fish. Pittsburgh using Carnegie Lake and Panther Hollow, the latter site of the city owned overnight camp David L. Lawrence, had approximately 2,000 children participating and catching 300 fish.

At present each child who arrives at a fishing site is lent equipment consisting of an eight-foot cane pole complete with line, bobber, hook, and bait. A representative of the Commission briefs the children as to types of fish they might catch, how to use the equipment and safety factors involved. The children are then turned loose under supervision for a few hours fishing. A colorful paper hat is given to each child making him an official member of the "Center City Cane Pole Club" and those lucky enough to catch fish are given plastic bags in order to carry their "trophies" home.

From this beginning the program has been expanded to some of the smaller municipalities in the state such as Allentown, Altoona, Reading, York, and suburban Montgomery County. A Philadelphia owned summer camp for children, located in Monroe County which provides outdoor recreation for children and has an attendance of 300 children per week is another area where the program is in progress.

With an earlier start and its advantages of more detailed planning, the program is exceeding the number of children it was able to reach last summer. And after this year's program is concluded more ways of improving and expanding will be given consideration in order to bring the sport of fishing to an even greater number of children in areas where fishing opportunities are rare.

PITTSBURGHER NAMED WINNER

Ralph Warren Abele of Pittsburgh is one of 21 persons from across the nation named to receive an American Motors Conservation Award in 1969.

Abele was honored for spearheading an all-out conservation campaign while serving in various leadership capacities with the Allegheny Council of the Boy Scouts of America. He organized and placed into operation a full scale conservation program for the Allegheny Council's 27,000 scouts and 6,000 adult leaders which includes such projects as reforestation, soil surveys, mine pollution control, stream improvement and hunter safety education.

The awards are presented each year to 10 professional and 10 nonprofessional conservationists for dedicated efforts in the field of renewable natural resources, although in 1969 one joint award was given bringing the total number of persons honored to 21.



NORTHAMPTON County Waterways Patrolman John Weaver awards trophies to the winners of the Femme Rod & Gun Club. The trophies are given each year by the club to its two members who catch the largest trout as well as bag the biggest buck. Shown are: Mrs. Dolly Colver, deer trophy for 8-point buck; Judy Filonge, 15½ inch rainbow trout; Mrs. Betty Moser, president of the 37 member organization, and Mr. Weaver.

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TO TROUT -with love

THE LINE OF DRIFT

The third feature with which we must concern ourselves is the precision with which the lure must alight on the water. Like most members of the animal kingdom, the trout is a peaceful, easy-going critter, who eats only when hungry. When hunger strikes, he will move to what is known as his "feeding station." This is a pocket of relatively quiet water formed by an obstruction in the stream. Like a funnel, the obstruction causes the normal flow of the current to increase and squeeze by in a narrow channel. The more rapid flow moves small stones in the stream bed, dislodging the larvae of acquatic insects, as well as bringing surface-borne food into a smaller approach line. This smaller pattern is known as "line-of-drift."

From his position in the quiet water, usually behind a large rock or log, or beneath an undercut bank, the trout will dart into the current to intercept bits of food from the passing drift. Although the eyesight of a trout is extraordinarily keen over short distances, visibility through water is extremely limited for any creature. Therefore, the fish chooses a feeding station at the narrowest line of drift which will give an adequate food supply.

In most cases, the line of drift will not exceed two or three inches in width. Material drifting in the normal current will be drawn about two inches by the suction effect of the faster flow, thus giving the angler a target area about six inches wide in which to place his lure. Here again, care must be taken so that the leader does not catch the current before the fly, drawing it, like a miniature speedboat, through the line of drift. A towed fly is possibly one of the best fish-frighteners in the angler's repertoire, second only to a splashing line or a disturbed current.

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Creature - -

there may be only two tails at the end of the abdomen. The males have at the end of the abdomen two forceps-like appendages used in grasping the female for mating. Most females have a long scoop-like process arising from the underside of the seventh abdominal segment, which holds and guides the eggs.

Most people have observed the mating flights of mayflies. They occur near water at almost any time of day. Great numbers of males usually make up a mating swarm. Each male flies quickly upwards and then suddenly drops downwards again, only to rise once more. This up and down flight is continued on and on, while females enter the swarm alone and at intervals. Each female falls into the up and down rhythm, and is usually seized shortly by a male. Both drop out of the swarm and mate on the wing.

After mating, females turn to their primary purpose in life, which is laying eggs. Their bodies are marvelously adapted to this end. The food canal is used as an air reservoir, and the whole body, even up into the rear of the head, is filled with eggs. Well-oxygenated waters of lakes and streams are chosen as the egg laying site. Some females wash off a cluster of eggs each time they alight on the water's surface, some lay all the eggs in one clump, and others crawl beneath the water and afix the eggs to a rock or stone. Both sexes die soon after mating and egg-laying. The total adult life from transformation to death may span two days or so at most.

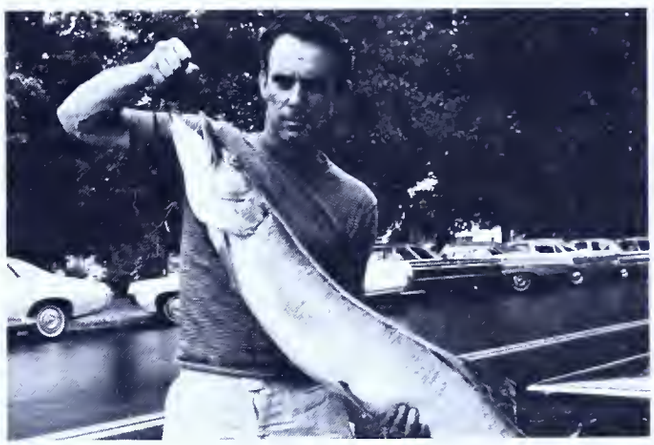
Not all females lay eggs, however. Some give birth to live young and sometimes young are hatched from eggs not previously fertilized (parthenogenesis).

Adult mayflies take no food during their brief life, since the mouth parts are small and nonfunctional. They seemingly exist only to provide food for other organisms. No known insect accomplishes so much in such a short time.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN





ABOVE—MUSKIE FISHERMAN Ed Crumlich of New Cumberland holds a 44 in., 20 lb. 4 oz., muskellunge he landed late last summer while fishing the Susquehanna River near Harrisburg. Well known for his muskie fishing abilities, Crumlich reported hooking six of the big fish on six consecutive days while fishing the same area.

LEFT—BIGGEST WALLEYE reported caught in a long time is this 14 lb. 5 oz., 34½ inch catch made by Pleasantville fisherman Carlyle Sheldon. It weighed more than two pounds over the state current record walleye (36″, 12 lbs.) but fell 1½ inches short of its length. Sheldon was using a red and white jig he had made himself while fishing French Creek near the mouth of Conneautee during February.



SIX-YEAR-OLD Skip Wagner and sister Salley, age 7, of Emporium with the big carp he caught while fishing the Susquehanna River at Danville last summer. It weighed 11 lbs. and took a worm. Young Wagner was using a spinning outfit and 6 lb. test line.



ANOTHER BIG CARP landed by a young angler was this 16 lb. 30 incher caught by 10-year-old Thomas Drake of Pleasantville. He was fishing the Allegheny River in Warren County with a bucktail when he made the catch—and won a Junior Fishing Citation for it.



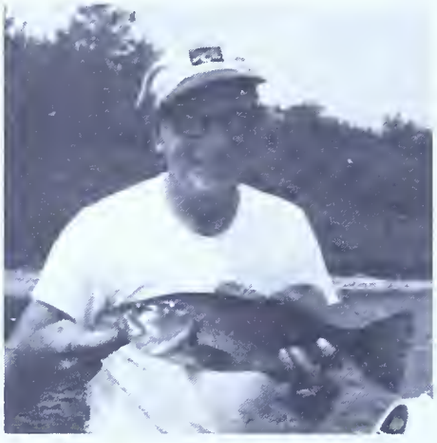
FISHERMAN Bart Strasser of Hawley holds a pair of big largemouth bass he caught last summer while fishing the popular Lake Wallenpaupack in northeastern Pennsylvania. The two fish measured 23¼ inches and 20½ inches. Tackle and bait not listed.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



UNUSUAL CATCH was made by Vernon Clemmer of Souderton last summer. That's a 22½ inch, 5¼ pound Cisco he caught fishing Lake Wallenpaupack.



LOUIS WOLOWNIK of Quakertown landed this nice 18 inch largemouth bass while fishing Lake Wallenpaupack in the popular Poconos last summer.



LONGNOSE GAR was caught by Raymond M. Newman II of New Castle in Lake Erie. It measured 32½ in. and weighted 2 lbs.







ERIE FISHERMAN Lawrence Pfister (above left) holds 14⅝ inch, 1 lb., 5 oz. yellow perch he landed fishing Lake Erie. Conemaugh angler Ed Michura Jr. (center) landed 18½ inch, 2 lb., 1 oz. brown trout from the North Fork; Lewistown fisherman Parke Brown (right) holds the 10½ inch, 1 lb., 2 oz. rock bass he landed from the Juniata River. Pfister won a Senior Fishing Citation while both boys won Junior Citations.



FISHERMAN JOHN POLISHAN of Scranton holds a big walleye he landed while fishing the Delaware River. It measured 31¾ inches and weighed 10¾ lbs. Bait and tackle not listed.



ANGLER DUANE WETICK of Butler holds 36 inch, 12¼ pound muskellunge he landed while fishing the Susquehanna River at Falmouth last November.



PAXTON WHIPPLE of Wellsboro landed this 24½ inch, 5 lb. 7 oz. rainbow while fishing Beachwood Lake in Tioga County in February. It won the 13-year-old angler a Junior Fishing Citation.



GRANDPA (Allen Romberger) caught these muskies shown with Clark Romberger! The fish measured 40½ and 38½ in., and weighed 18½ and 14 lbs.





TEENAGER DEBRA CHRISTIAN (above), 17, of Easton holds an 18 inch, 2 lb. brook trout.
BIG MUSKIE was caught by George Stewart (right) of Seneca at Canadohta Lake in January. It measured 46 inches, weight 29 pounds.





PLEASANT GAP ANGLER Mrs. Mary Luke (above left) holds 15½ inch palomino rainbow caught in the Logan Branch.
FISHERMAN SHARMAN HOWARD of Harrisburg (above right) holds 15 lb., 26 inch carp from the Susquehanna.





SENIOR CITATION was won by Howard Spigelmyer of Selinsgrove (above left) for the 21⅛-in. 4 lb. 10 oz. smallmouth bass.
ANGLER Allen Black, 11, of East Freedom (above right) holds the 20 inch, 4 lb. catfish he landed from Lake Groundhog.



DALE YASHINSKI, 15, of Titusville holds 32 inch, 8 lb. 1 oz. northern he caught while fishing Canadohta Lake in Crawford County last winter.



BROWN TROUT caught by Victor Padwlese of Philadelphia in Wissahickon Creek. One measured 19⅝ inches and weighed 2 lbs., 10 oz.; the other measured 18¼ inches and weighed 2 lbs. 5 oz.



JUNIOR CITATION WINNER Jim Wagner holds 24 inch, 6 lb. channel catfish he landed while fishing Glendale Dam in Cambria County last summer.





BRIAN LEIBOLD, 12, of Laureldale (above left) holds an 18½ inch, 4 lb. largemouth bass he caught in March while fishing Bernharts Dam. It won him a Junior Fishing Citation.
GEORGE R. STERNER of Hohnton (above right) holds 16½ inch, 2 lb. white catfish he caught while fishing Ontelaunee Lake in Berks County. It won him a Senior Fishing Citation.





BOBBY MARTZ, 6, (above left) holds two trophies he won for the largest crappie (8 inches) and largemouth bass (15 inches) entered in the Junior Division of Glendale Lake Fishing Contest.

LAKE ERIE ANGLER Lanen Lydic (above right) of Lake City holds 19 inch smallmouth he caught while fishing off Elk Creek.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

HICKORY RUN—

YOUTH FORESTRY CAMP Number Two represents many things, one of which is a cooperative nursery. Located in the heart of Hickory Run State Park, Carbon County, the camp houses fifty court-committed boys primarily from the Philadelphia area. Ernie Powell, Camp Director, Department of Welfare, sits on top of the operation with the help of his staff and people from Forests and Waters, the Game Commission, and of course, the Fish Commission.

The purpose of the camp is to give the youths a sense of responsibility and belonging. To do this, the boys work on specified forest and conservation projects under the guidance of Robert Kerr, Park Superintendent, and his foreman, Harold Whisler. As a result, the 15,000 acre complex is one of the most attractive outdoor recreational areas in the state.



RACEWAY of Youth Forestry Camp Number Two is inspected by members of cooperating agencies which help with the project. Additional raceways were scheduled at the time this picture was taken last winter.

However, there is more to it than these assigned projects on scheduled working hours. Local high school teachers provide a basic educational program and in the off hours there are special volunteer projects such as the cooperative nursery thing and a pheasant rearing program. Let's deal with the former to get the article back in line.

Nick Charnichko, Program Director, began the story for us with the fact that the present nursery was established in 1967 on Hawk Run at the eastern end of the park. It was a volunteer effort, done on free time, and the end result was a 75 foot raceway of cement block construction. About 3,000 brook trout were added and the camp was well on its way to adding quantity and quality to the fishing in the Hickory Run State Park area.

The nursery project turned out to be successful in several ways. Perhaps most important was the interest shown in it by the campers. Some boys found the trout raising and stocking to be the first thing of value they had ever been a part of. This, according to Nick, was a prime issue in the overall purpose of the camp. Actual physical results were also good. The trout grew well; there was little mortality; and the area's fishing picked up. Net result of this success will be two more fifty-foot raceways to be constructed in early 1969. In fact as this is being read, they will probably be operational.

Among the campers involved with the nursery project are Joe Hydock, who perhaps has the most interest, and Tom Singleton, Tom Fantini and Ronald Wiesner as other leaders in the nursery activity. These boys will be around for the development of the new portions of the raceways and are looking forward to the increased fish production and activity. It should be mentioned that the average stay at the camp is about eight months so these fellows will soon be turning over their nursery to other capable hands. It can be safely assumed that a little bit of sentiment and nostalgia will also exchange hands at the same time.

Being a little more objective about the nursery and its operation, the 3,000 brooks were being fed a diet of pellets at first. Later this feeding pattern was changed to a mixture of venison, liver and pellets. It was found that the trout showed a preference for the venison, ignoring the pellets when fed the mixture. Late word received indicates that the feeders have switched to a 100% venison diet and the trout are showing faster growth. The venison, incidentally, is supplied by the park and game people from road kills, hunter donations, and a few confiscated illegal kills.

The water supply comes from Hawk Run and is steady with few problems. The area is shaded essentially with evergreens and there is a good natural fall to provide flow through the raceways. A complete screening of the nursery reduces predator problems to almost zero. A building for storage of food and equipment completes the scene. Well —not quite—because hovering in the background is Fred Ohlsen, Waterways Patrolman, a jolly man, caught up in his profession, who stands ready and willing to help the boys in their cooperative nursery project.

The story is just about complete. There are others involved. Residents of the area have donated materials for the nursery. There is good rapport between local sporting clubs and the campers and their various outdoor projects. Everyone seems to realize the value of the initial purpose of the camp and the benefits derived from the efforts of the youths staying there. There is considerably more to the idea that *Casting with the Co-ops* pays off for Youth Forestry Camp Number Two than just adding a few more fish to a stream.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

From R. A. M., Weatherly:

"Do I need a license, permit or registration for my new 12-foot rowboat and what must I do before I can go fishing in it?"

—Your 12-foot rowboat needs no license or registration of any kind, unless you will be using an outboard motor on it. If a motor will be used, you must register the boat. The necessary application form can be obtained from most boat dealers, or from the Pennsylvania Department of Revenue, Harrisburg. Even if you do not power the boat, you may wish to register it for identification or proof of ownership. The fee is only $4.00. Don't forget your fishing license!

From T. L. M., Charleroi:

"My houseboat performs well with its single engine, but I would prefer twins in case of a failure. How difficult would it be to convert this boat to twin screw?"

—Your boat can be equipped with twin engines, and many of this particular model were equipped with two mills. However, since you are primarily interested in the safety aspect of having a second power plant, we would suggest installing a small outboard on a transom bracket. Several manufacturers offer long-shaft models designed for sailboat wells, with all the controls on top. This arrangement will get you home safely if slowly in the event of an engine failure, and cost only a few hundred dollars instead of the thousands that could be involved in converting to twins.

From J. B. E., Everett:

"My 17-foot fiberglass boat has a space between the floorboards where water and dirt collect. Could I bore a few holes in the floorboards and fill this space with poured-in-place foam?"

—This can be done, but the amount of foam created by a given quantity of liquid components is very difficult to predict, and you could damage the boat if you had too much of the stuff expanding under the sole. Offhand, we would say the project you contemplate would not be worthwhile, as it is certain to be expensive and will really do nothing to improve the boat.



From C. F. R., Erie:

"The automatic bailer in my Higgins runabout has always worked well, but the last time out it started to operate in reverse, and was bringing water in. What is wrong?"

—The bailer used in your boat is a syphon constructed of a gooseneck of copper tubing. There is a very tiny hole at the top of the bend, which lets in enough air to break the action when the boat is at rest. This hole is apparently clogged, and should be opened. To avoid enlarging it and ruining the device, use a single strand from a wire brush, as this is about the right diameter. Check the hole occasionally to be sure it stays open.

From G. G. L., New Wilmington:

"No paint I have tried will stay on my steel-hull daycruiser. How can I get a finish that will last a full season?"

—The only way possible is to sandblast the hull to "white metal" then prime it immediately. We would suggest getting a professional industrial painter to do the job, which should be good for several years with only touch-ups as required. There is no kind of paint that can be applied successfully over rusted metal, and no way to get the metal really clean except by sandblasting.

From H. F. C., Pittsburgh:

"I have an opportunity to buy a boat that has been left in a dealer's yard and is being sold for repair and storage charges. The dealer says he is unable to locate the owner. Can I safely buy this boat?"

—If the dealer gets a court order to sell the boat, and it is sold at public auction, then the buyer will have a good title. However, if the dealer sells it informally, all he is selling is his interest, and all the buyer acquires is the possessory lien passed from the dealer. In the second case, the original owner could still claim an interest, and legal difficulties would most likely result. If you are satisfied that the former owner cannot be located, and the price is so attractive that you are willing to gamble, go ahead, but keep listening for that knock on the door.

THERE MAY BE A SPOT FOR YOU



Ever wondered what it was all about? There may be a spot for you—and your boat—at some Pennsylvania marina.

Discover more about boating, more about fishing, and more about the Keystone State—find YOUR spot in watersport!

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(July 1969)

AUGUST, 1969

PENNSYLVANIA Angler

the Keystone State's Official FISHING · BOATING Magazine...

25¢ Single Copy





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DOCUMENTS SECTION
JUL 29 1969

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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



ENJOY PENNSYLVANIA!

August in Pennsylvania is usually marked with a variety of weather patterns. On the unpleasant side are the hot, sticky afternoons and evenings enlivened with flashing "heat" lightning around the horizon. In sharp contrast are the beautifully clear, bright August days that can't be matched in any part of the U.S.A.

In any event, the Pennsylvanian need never worry about getting bored with the same weather patterns day after day.

Actually this day to day change of weather seems to stimulate far more outdoor activity than one finds in areas where it's always sunny.

Knowledgeable fishermen are quick to take advantage of a thundershower that brings a sudden rise to a favorite stream. These summer showers are often icy cold and bring a surge of cooler water to sun-warmed streams, stirring trout and bass to quickened activity.

The hot humid days provide the perfect excuse for the boating family to spend a refreshingly cool and pleasant evening cruising. Campers welcome the excitement of a sudden shower that causes young and old alike to scamper frantically to get everything tied down and under cover.

We believe it is fortunate to live here in Pennsylvania where the four full seasons—summer, fall, winter and spring can be enjoyed; where we have deep forests, rolling mountains and beautiful farm lands within easy drives of our major cities; where we have many large flowing rivers, countless streams and a wealth of lakes and ponds that are free and accessible to those who want to use them.

Most Pennsylvanians are near to good fishing, good boating, bountiful hunting, free parks, and picnic areas and a veritable wealth of outdoor recreation facilities—public and private right at home in our Commonwealth.

If you haven't settled your vacation plans or have a free weekend, few places have more to offer in the way of outdoor recreation facilities than we have here in Pennsylvania.

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COMMONWEALTH OF PENNSYLVANIA

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

AUGUST 1969 VOL. 38 NO. 8

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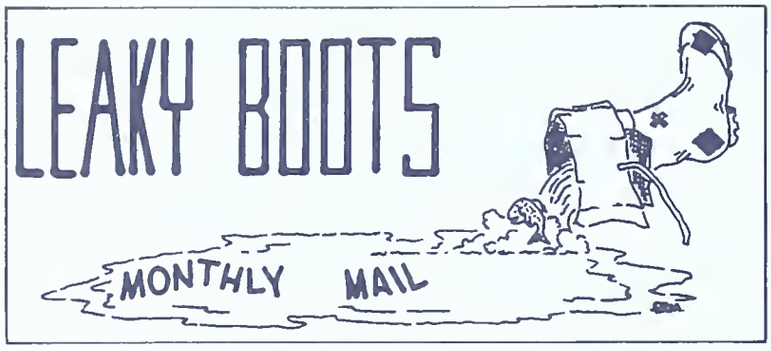
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D. THOMAS EGGLER, EDITOR

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"TOYS" LETTER

Gentlemen:

In regard to the article entitled "Toys," printed in the April edition of your magazine.

The trail machine is a sport to many people, just as hunting and fishing are to others. Used properly the trail machine can bring endless hours of fun exploring the outdoors; along with being an excellent rescue vehicle. As far as our "beleaguered wilderness," God put the wilderness here for us all to enjoy, so who are some people to say how we must enjoy it. For the so-called, "dangerously soft and decadent," the trail machine offers the opportunity to explore the wilderness, without the threat of over exertion and at the same time offers a relaxing amount of exercise. I would like to close with a very old and well-known phrase, "If you never tried it, don't knock it."

Dale E. Schylaske, Tower City

TAKES EXCEPTION

Gentlemen:

I take serious exception to Mr. Wayne Johnston's letter in the May issue of the Angler stating that we should have a combination game, fish, and forestry department. I'm sure he doesn't realize what he is suggesting. There are perhaps a few of our over a million sportsmen in Pennsylvania that favor the combination idea but most of them are more anxious to get their political fingers in funds that have so far been managed and carefully used by our two commissions.

The Fish Commission is building access locations to enable not only fishermen but every boat owner to reach rivers and lakes. They are raising and stocking better, larger and more fish per square mile of state than Mr. Johnston's State of Maryland. I know because I have used a Maryland non-resident license and trout stamp. Our Fish Commission is entirely supported by fishing license fees and not a penny of the taxpayer's money. The same holds true for the Game Commission—it is supported by the sportsmen's license money and the sportsmen's dollars have purchased over a million acres of land for public hunting. How long would all of those acres be for hunting only if the politicians ever get control of them?

I have hunted and fished in several states and Canada and have yet to find one that did not praise and envy Pennsylvania for having separate NON-POLITICAL Commissions.

I wish Mr. Johnston would talk with Maryland officials. I know many of them and have had many tell me they wished they had the same kind of set-up that we have.

Mr. Johnston says that our Game and Fish News will be 9″ x 11″ and have a hundred pages. It sounds as if he has been talking to a high official here in Pennsylvania. But being an active sportsman and an alternate member of the Federated Sportsmen I doubt such a publication will be issued for a long, long time yet.

L. T. "Shorty" Manning, Norwood

GOBBLEDY-GOOK

Gentlemen:

Several years ago one of the Pennsylvania Angler issues was crowded with financial reports, administration reports, executive reports and a lot of other facts and figures which I didn't subscribe to so I quit your publication. I understand these are necessary and required, but I didn't appreciate the reports one bit.

I like fishing tips and fishing stories pure and simple and the only figures I care about are concealed by dresses.

However, I was particularly impressed with your February 1969 issue which I purloined. The center section on the above gobbledy-gook can be torn out for guys like me who do not care for all the Amos and Andy millions, but are interested in the rest of the magazine. Thanks a million.

Enclosed is my subscription for three years!

Stephen A. Mihalick

HELP NEEDED!

Dear Sir:

I'm writing to you in the hope that one of your readers can help me.

This year's opening day of trout season—though producing a couple of decent size fish—was one of disaster for me.

In the morning, while fishing Mud Run in Hickory Run State Park, a box of flies must have fallen from my vest pocket. The box was a Perrine Aluminum, containing about 150 flies, including a number of untested size 24's and 28's and some experimental streamers.

To compound my misfortune, in the late afternoon, I stopped to take a couple of photographs at day's end and somehow managed to leave my fly rod and reel behind; at a small lake near the Hickory Run Headquarters. The rod is a Berkley Parametric, the reel a Pflueger #1494 with Air Cel Supreme line. My father once told me if it wasn't for my bad luck, I'd have no luck at all.

I feel that if one of the readers of the Pennsylvania Angler came across any of these pieces, he would probably be looking for its owner.

I can be reached at the television station, where I work. A reward, of course. Thanks a million.

Donald R. Spause
WKBS-TV-NEWS
3201 S. 26th Streeet
Philadelphia, Pennsylvania 19145

NO SASSAFRAS

Gentlemen:

With reference to the article "Streamside Survival" by J. Almus Russell in the April issue of the "Angler," I believe that you will find on close examination that J. Almus is viewing tulip poplar (L. tulipilera) sprout on the photo on page 38, instead of sassafras as indicated in the caption.

Granted that sassafras has many varied shaped leaves, but that was just too much.

I enjoyed the remainder of the article as I have most of the other articles found in this and other issues.

Keep up the good work, but please have J. Almus review his dendrology.

William C. Miller, Montgomery

I am at a loss how I confused tulip-poplar with sassafras. I have been familiar with chewing the root and drinking the tea since I was a child; and I have often picked the fragrant twigs for my children to chew, and shown them the three-type leaves.

So kudos to expert dendrologist Bill Miller of Montgomery for properly identifying tulip-poplar leaves, mistakenly characterized as those of the sassafras.

J. Almus Russell

COMPLIMENT

Gentlemen:

This is something I do very seldom—perhaps all too seldom. But I do feel the urge to compliment you on the kind of magazine which the "Pennsylvania Angler" now is.

At the time the Northeast Fish and Wildlife Conference was last held in Boston, I spoke briefly to the point that our State fish and game publications had for some time been expending most of their efforts on explaining technical aspects of fish and wildlife management. It seemed that our present need was to convince more people of the joys of hunting and fishing and thus build up use of these resources. Obviously, the more people who ardently hunt and fish, the more effectively we in the profession can defend the habitat against damage and destruction.

It seems to me your magazine is doing a fine job of encouraging more participation and helping those who do participate to have more fun doing so. I do not know all the factors, certainly, that contributed to the remarkable increase in numbers of licenses sold during period July 1, 1967 to June 30, 1968 as compared to the July 1966 to June 1967 period, but it seems that the "Pennsylvania Angler" might well have been one of them.

Ralph A. Schmidt, U.S. Dept. of Interior

"TWENTY-EIGHT" CLUB

Dear Sir:

All of my fishing for the past three years has been confined to pond fishing where I have used nothing but a No. 28 hook (the smallest eye hook made.) It was strictly sport fishing with a fly rod. The following is my record:

In 1966—316 landed; 1967—565 landed; 1968—603 landed; 75 netted (suture tippet) largest one 9½″ brookie; 1968 grand total—678.

These figures are statistically substantiated. The species were rainbows, brooks, and browns from 6″ to 15½″.

My fishing gear was a 7′ 9″ rod, a single action reel, an HCF line, 7′, 9′, 12′ 4 x tapered camouflage leaders and Gudebrod clear color blending nylon thread for tippets (.005 of an inch in diameter and the tensile strength is about 2 lbs.). Flies—dry, wet, nymphs, and streamers and No. 5 shot sinkers.

It was quite a problem to get a suitable container for a fly box but after many hours of deliberation, a concept of inconceivable richness entered my mind. I procured a small aluminum fly box and tore out the metal shield and spring. Next, I bought some magnetic discs and glued them to the box. Let the wind blow now! Oh, yes! I sprayed the inside with white enamel. This made the size, shape, and color very predominate.

Fly fishing is rapidly attracting more interested followers than it has in the past. While the percentage of fly fishermen to fishermen using other types of tackle may not be as great as it was 20 to 30 years ago, I certainly think the number of fishermen have been increasing steadily. The fishing schools which our Commission has been conducting, as well as those conducted by such groups as Trout Unlimited, have contributed to the knowledge and interest of angling in general and in fly fishing specifically. Fly tying courses which television has sponsored seem to attract good numbers of anglers, indicating that many people are interested in this art and the sport of fly fishing as well. I think, also, the increased number of "Fly Fishing Only Areas" indicate that many sportsmen are interested in this type of sport angling.

I believe there is a good market for a "Number 28 Club" and, that many anglers would be interested. Such a project would require planning, money, publicity, dedicated persons, etc., but it certainly would be worth it.

A lapel button could be available (picture of a fish plus the numeral 28.) Suggested finishes are bronze (1-50 landed), silver (50-100 landed), and gold (100 landed.) The cost—reasonable.

There is a "Hole In One Club" for golfers. Why not a "Number 28 Club" for fishermen?

There are so many things that I would like to say, but space will not permit. I'd like to have other fishermen write me for further information and express their opinions in regards to organizing a "Number 28 Club."

Clarence S. Bowman, Johnstown

CITATION?

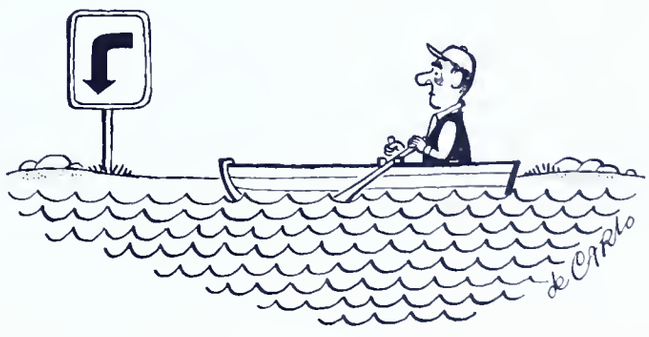
Dear Angler:

Giving citations, how about me?

I haven't caught any so far this spring, but I did help carry buckets of trout from the truck to the Ambler Reservoir. I also got some hippies who came in on motorcycles to help.

I would love to wear one of those blue and white patches on my sleeve. Oh yes, I am 61 years old and dad taught me how to fish. He was a great fly fisherman, had all his licenses since 1922 (when it was just a slip of paper.) He fished until he died in 1959, at the age of 86.

Mrs. Ida Widmann, Horsham



FISHING ACCIDENTS?

Dear Sirs:

In reply to your release of April 1, I wish to voice a protest.

In the first paragraph, you refer to "boating accidents."

I would like to point out that this is, in many cases, a misnomer. There are actually very few "boating" accidents. And don't say that I am prejudiced, because we fish *and* boat in our family.

In many instances, water accidents are caused by fishermen, but the accident goes on record as a "boating accident."

Don't you think you should reword your statistics, set the record straight, and call these capsizings by their rightful name, in other words, "fishing accidents?" I do.

Mrs. Alexander Lee, Stroudsburg

Your letter expresses an attitude which I feel is based on some misunderstandings and prejudices harmful to boaters and fishermen.

Although we readily recognize there are different uses to which boats are put, we, as well as the U.S. Coast Guard and all other organizations interested in safety afloat, consider a boat to be a boat and are just as much interested in preventing accidents to boats occupied by people fishing as we are in those in boats otherwise engaged. They are all part of the statistics and, together, comprise the "boating public" we are trying to reach in our educational efforts. It is a well accepted fact that most boaters sometimes fish; in fact, fishing is the leading form of water activity engaged in by boat owners. It is also true that hunters and fishermen are the most difficult group for us to reach and constitute a large percentage of our casualties.

I do not see that any good would come from differentiating between "boating accidents" and "fishing accidents" as you suggest, although I will admit that our statistics should show where the major problem is. I can see some damage resulting from segregating "boaters" from "fishermen." Our objective is to promote safety and maximum enjoyment upon Pennsylvania waters by the greatest number of people in boats, whether they are fishing, cruising, sailing, rowing, or water skiing.

The same rules of the road, good boatsmanship and precautions against overloading or improve loading apply to anybody who takes a boat onto the water. We would like to have all of this group support us in our efforts to promote safety and enhance the pleasure of boating in Pennsylvania waters.

The problem of obtaining more accurate and meaningful statistics is well recognized and was mentioned several times in hearings before the House of Representatives Committee on Merchant Marine and Fisheries which considered federal boating legislation last year, Representative Edward A. Garmatz of Maryland, Chairman. The published report refers to the hearings as having been held on "Bills to provide for a coordinated national safety program to reduce boating accidents, and deaths and injuries resulting therefrom." The information brought out at those hearings is the source of our statistics and agreed very closely with the results of our own records for Pennsylvania boaters.

Thank you for your interest in boating and I hope that you and your family will continue to both fish and boat with safety.

Charles E. Leising, Capt., USCG (Ret.)
Assistant Executive Director
Waterways

PAT ON BACK

Gentlemen:

I received the current Angler yesterday and while it was as usual . . . GOOD; still the most exciting part to me was the detailed section on the Citation winners, etc., for the year. I don't know how many anglers would have taken the time to go over each catch. I did and I think it is a great big PAT ON THE BACK for the Pennsylvania Fish Commission when I see the spectacular catches, in profusion, made in our state last year!

When I realize that for many years, we went to Canada for walleyes, back in waters which were supposed to be close to virgin, and the average large walleye was 5 to 6 lbs., 24 to 26 inches, then to see the large number of 30″ + walleyes caught in various waters of Pennsylvania last year, this was a real achievement.

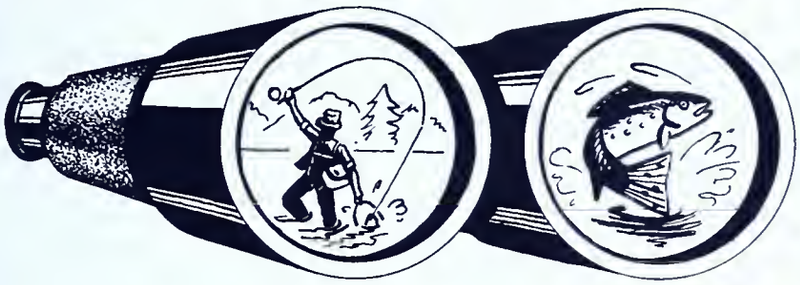
And when muskies are turned in, not 3 or 4, but dozens in the 40″ to 50″ range and from areas in the Center and Eastern part of our state which a few years ago didn't know a musky from a northern, this in itself is proof positive of some darned good work and thinking on the part of men in our Fish Commission who looked ahead far enough to visualize the potentials.

It is true that we have few, if any, Field and Stream prize winners but this should not bother anyone. Muskies in the St. Lawrence and in Wisconsin, due to unusual and specific growth conditions, will continue to take the prizes in the National contests; yet I for one never worry about winning prizes and acclaim for big fish. My own thrill, as is the thrill of thousands of other fishermen, is to land a good sized fish, get a good fight on light tackle and feel we have been amply rewarded by the Red Gods.

One more comment, along the lines of certain person's thinking that we should combine both hunting and fishing into one publication. Don't EVER give up a publication which is directed to and for fishermen ALONE. They constitute the very largest group of sportsmen in our country and they spend more dollars to enhance the economy of our nation than any other group of sportsmen! I was in Sarasota, Florida this past winter. I noted in the daily newspaper several pages each day devoted to baseball, basketball and golf, yet in spite of the fact that literally millions of dollars are spent in the area on boats, tackle and other equipment, far overshadowing the money dumped into the area economy by the "spectators" of the other sports; yet the fishing news and angler's tips and reports was quite meager as compared with the space given the spectator sports.

I might point out at this time, as a compliment, the stories done locally for our area newspapers by Steve Szalewicz of Oil City. Steve really works at it (as an example the story in the May Angler done on the Bird Watchers' Canoe Trip) and you just can't get this kind of story by sitting on your royal derriere in an office.

Howard Levy, Titusville



FISHING OUTLOOK

AUGUST, 1969

By.. Stan Paulakovich

KINZUA

WITH SIRIUS, THE DOG STAR firmly entrenched in the heavens, the sun's rays seem to beat unmercifully down on the earth during August. The dog days are upon us. The lethargy and the laziness evident in our actions appears to have been transmitted to the fishes. Low, crystal clear streams make trout fishing extremely difficult to say the least. Luxuriant aquatic growths are at their fullest and these offer hiding places which are almost impossible to fish properly.

In August most of the aquatic insects have already completed their hatch. A few May flies such as the Pale Evening Dun and the Ginger Quill plus some of the Midges occur in late evenings during the month and will still take fish. Most trout fishing now should be confined to the use of terrestrials, both the imitation and the originals. Ants, black and red, grasshoppers, crickets and beetles including the Japanese Beetle offer trout a pleasant change of diet. Presented on a fine wire hook with a light leader to a pocket under an overhanging tree or bush or to an undercut bank next to a grassy field these will often tempt even the wariest of trout. Sneak fishing is a must along the smaller trout streams during August. A careless step, shadow or quick movement will chase even the hungriest trout back to his hiding place and quickly curtail his appetite.

Fishing for the pan fishes—rock bass, blue gills, crappie bass and yellow perch—can be interesting in August. Try using some of the earlier mentioned baits like crickets and grasshoppers and also wood grubs, small minnows and the nymph of the dragon fly, called by some bass bugs. Bass bugs are relished by all of the pan fishes and can be obtained by sifting through the leaves, muck and detritus from the bottom of shallow ponds where dragon flies are prevalent. An interesting day of light tackle fishing plus some good eating are in store for those who fish for pan fish now.

Becoming increasingly more evident in nature's scheme and providing a major source in the diet of the basses during August are frogs. After a summer shower when everything is wet and drippy, frogs which seem to have fallen with the rain are everywhere, along the banks of rivers, ponds and lakes. This year's crop of some of the chorus and wood frogs plus last year's green and bull frogs are a T-bone steak to a bass's way of thinking. In lakes and ponds each stump or clump of lily pads is a death trap to any unwary frog who dares to venture where Mr. Mossback can get a shot at it. Hair bugs, popping bugs, plug imitations and small frogs themselves cast into these areas often work wonders.

Along our major rivers the smallmouth and to some extent the walleye also rely on frogs to supplement their daily fare. In the evenings when the pangs of hunger and the security of stillness draws the smallmouth from the safety of his lair into the shallows, he becomes an easier target. Fishing before bass leave their sanctuary, baits such as nightcrawlers, helgrammites and crayfish are recommended. After they have moved to their pasture land in search of easier prey, baits such as frogs and minnows and their imitators both surface and under water will take these cruising smallmouths and an occasional walleye.

One area stands out in my mind as being a perfect spot for a family combination fishing, boating, camping and vacation spot in August—Kinzua Reservoir, located in Northwestern Pennsylvania in Warren County and a portion of New York State, with over 12,000 beautiful acres of water. Ninety miles of scenic and somewhat remote shoreline are reached by five major and numerous smaller access areas. Some of these have boats for hire. Located about seven miles northeast of Warren, Kinzua is reached by Route 59. Public campsites are scattered throughout this section of the Allegheny National Forest.

This Flood Control Reservoir was formed by damming up of the Allegheny River and has tremendous potential as a fisheries resource. Fishes native to that area include whopper muskellunge, smallmouth bass, walleye and panfish. These, plus the introduction of largemouth bass and the northern pike, should make a veritable fish hatchery. Waterways Patrolman George Jones of R.D. #1 Tidioute, Pa. 16351 (phone 814-484-3567) suggests the use of live bait—preferably minnows or minnow type lures—fished deep during August. This method should take any of the above mentioned species with special emphasis on yellow perch and crappie and even an occasional trout.

The tailrace of Kinzua Dam is proving to be one of the finest "fish'n" holes in the entire river. Fishing with minnows and jigs has been fantastic over the past few summers. Many trout and walleye are caught there annually. Fishermen should be extremely careful as the currents are strong and the bottom drops off rapidly. Jig fishermen bring along plenty of jigs as you'll lose plenty in the rocky bottom.

For further information on this area write to: Warren County Development Association, Box 844, Warren, Pa. 16365.



WATER SKIING is a growing part of Pennsylvania's water-sport activities. Ski belts as this skier is wearing may be helpful when upsets occur, but are not considered approved life saving devices.

LSD* — *Life or Death*

by DEAN KLINGER
Chief Marine Services Specialist
Waterways Division
Pennsylvania Fish Commission

THE ONLY PIECE OF SAFETY EQUIPMENT presently required on all sailboats and motorboats is one approved life saving device for each person on board. Not only must this item be on board but it must also be readily accessible and in good condition. A badly torn or punctured device or one that is stowed in a locked compartment or other inaccessible place can be little value to a person in distress.

Each person on board should know the location of the life saving devices as well as how to use them. Non-swimmers should be required to *wear* a device at all times. And expert swimmers should not hesitate to don them in rough weather, or while operating in hazardous waters.

Descriptions of the different types of approved life saving devices include:

1. Buoyant cushions—can be used on boats under 40 feet in length not carrying passengers for hire and straps must be firmly attached. If manufactured of kapok they must be sealed in plastic film covers. All must be labeled DO NOT WEAR ON BACK—they are not intended for wear but for hanging onto. A short length of sturdy line tied to the strap with a clip for easy fastening to your belt can be useful should you fall overboard. This way the cushion stays with you instead of sailing away with the wind.

The buoyant cushion should be recognized as the least desirable of the various types of equipment available because of the strength required for the user to maintain his hold. For short periods and with the straps properly used, the cushion will serve very well. Its main advantage from a safety point is its ready accessibility. As a boater sits on it and especially if the line, as suggested above, is used it is much better than a vest or life preserver stowed away.

2. Buoyant vests—(frequently miscalled life preservers) are also for use on non-commercial boats less than 40 feet in length. These come in three sizes, child—small for children under 45 pounds, child—medium for children under 90 pounds, and adult. An adult size device may be legally used for a child, however, a child size device cannot be used for an adult. This office recommends against providing any life saving device that doesn't fit the persons who might need it. Such compliance with the letter of the law rather than with its spirit will be of little assistance in a casualty.

Although the law allows an adult-sized device to be "counted" as protection for a child, the tragedy of a child slipping out of a vest or preserver that doesn't fit cannot be accepted. Be sure that your passengers know how to wear them properly as when they are put on the straps must be on the outside. A hint here would be to have children and non-swimmers actually try these devices on—in the water if possible—to be certain they fit properly and get used to them.

3. Ski jump vests—approved for use on boats under 40 feet in length. The high cost of this type of device and

* Life Saving Device

WHILE ENJOYING PENNSYLVANIA'S WATERWAYS BOATERS SHOULD KEEP APPROVED LIFE SAVING DEVICES HANDY, NOT JUST TO MEET LEGAL REQUIREMENTS BUT ALSO TO INSURE THAT ADDED MARGIN OF SAFETY IN CASE AN EMERGENCY SHOULD OCCUR.



the fact that it must fit properly make it impractical for general use.

4. Life preserver—this is a heavy duty type of vest that can be carried on all classes of motorboats both private and commercial but which are required on vessels carrying passengers for hire. They must be international orange in color. They also come in three sizes and are reversible.

5. Life ring—comes in various sizes and is manufactured from either cork, balsa or foam and can be used on all classes of boats if it is at least 20 inches in diameter.

Types of non-approved life saving devices:

1. Ski belts—this device has the characteristic of raising its wearers back side out of the water and letting his face go under (as opposed to all Coast Guard approved life saving devices which are designed to float the wearer's face up if he becomes unconscious).

2. Government surplus may-vests—or any type which must be inflated by a CO_2 cartridge or otherwise are not approved.

3. Basket balls—can't seem to find these on the approved list. Boaters have tried carrying them!

The fact that life saving devices are available does not necessarily guarantee safety for everyone using boats. Last year's statistics by the U.S. Coast Guard show that out of 1,203 drownings, 122 people drowned while using life saving devices (this could have been from not wearing them properly or from cold water exposure). Another 501 victims had devices available but did not use them while 327 victims did not have them or use them. Some 253 drowned that investigators could not find whether life saving devices were available or not.

On any device you now own or plan to purchase be sure you are able to read the label and that it says "U.S. Coast Guard Approved." Add the proper amount of common sense to your boating, and then if an emergency occurs and it means your life or that of a friend's will be saved.

MARINE SAFETY EXPERT Dean Klinger, author of this article, examines an approved life saving device. Below are shown six types of life saving devices commonly found aboard many Pennsylvania boats, but only the four on the right meet legal requirements.



LIFE SAVING DEVICES should be readily available for use in case of an emergency. Pennsylvania's waterways patrolmen frequently report boarding boats with life saving devices aboard, but either stowed away where they would be of little value if needed. In fact one officer even found the devices locked in a box such as that shown below—and nobody had a key! If your children are joining you on the water be sure they are protected with life saving devices that fit. An adult size preserver on a child may be legal, but that won't be much consolation if he or she falls overboard and slips out of it.





YOU'VE PROBABLY SEEN ONE, YOU MAY HAVE FISHED ONE, AND YOU'VE CERTAINLY BEEN AFFECTED BY SOME OF PENNSYLVANIA'S GROWING GROUP OF . . .

SMALL WATERSHED LAKES

by Leonard F. Bryniarski

Wildlife Biologist

U.S. Soil Conservation Service



CRAWFORD COUNTY'S Tamarack Lake on Mill Run provides 556 acres of water for recreational use in the northwestern part of the state. Rustic signs like that shown to the left mark these waters.





NORTHCENTRAL PENNSYLVANIA'S Beechwood Lake in Tioga County is another spot where the joint effort of the Pennsylvania Fish Commission and the Soil Conservation Service have provided flood control and recreation for Pennsylvanians.



LOOKING for a new place to fish? If so, try your luck in a "watershed lake." Small watershed projects—especially multi-purpose lakes—are helping to link public demand for more fishing waters with sound conservation of our natural resources. Many local people have realized the increased pressure on our resource wealth and they are doing something about it. Of 104 small watershed dams authorized for construction, thirty have been completed so far. Many are planned to provide flood prevention and recreation. Multi-purpose structures are being constructed in the Sandy Creek (Mercer County), Briar Creek (Columbia County), and Marsh Creek (Tioga County) watersheds. Plans are also well underway for installation of similar structures at Kaercher Creek (Berks County), Brandywine Creek (Lancaster, Chester and Delaware Counties), Mauch Chunk Creek, Middle Creek (Snyder, Mifflin, and Union Counties), and Jacobs Creek (Fayette and Westmoreland Counties). Completion of these watershed dams will provide anglers with over 2,000 acres of new fishing water and the opportunities for outdoor enjoyment by the public on many of these sites will be terrific.

Beechwood Lake and Tamarack Lake, nestled in the scenic terrain of northern Pennsylvania, are already bringing good fishing to many anglers. The "whine" of unreeling line, as a hooked fish makes it last surge toward deeper water before finally being brought to shore and creel, is the type of excitement and pleasure you can expect on these lakes.

Local people in the counties of Crawford and Tioga saw the need for dams that would provide flood protection and fishing. Their dream was fulfilled. Planning of Beechwood and Tamarack lakes for multipurpose uses originated when the local people in each county learned how the Watershed Protection and Flood Prevention Act—commonly known as Public Law 566—could help them get the program under way. They were informed that this law, enacted in 1954, and administered by the U.S. Soil Conservation Service, authorized the Secretary of Agriculture to cooperate with state and local agencies in planning and carrying out small watershed projects. Such projects are initiated to stop destructive floods, improve agricultural water management, provide municipal and industrial water supply, and to enhance fish and wildlife resources. Although multi-purpose uses of impounded water is strongly encouraged, primary emphasis is placed on



SIXTY ACRES of water are available for use at Beechwood Lake located near Sabinsville in Tioga County.

construction of dams for flood prevention on all PL 566 projects. A small watershed project means protecting, managing, improving, and developing the water and land resources of a watershed through a sound conservation project-type undertaking.

Beechwood Lake was developed under Public Law 566. It is located in the scenic Mill Creek Watershed of Tioga County. This project was initiated to provide flood control to the towns of Westfield and Sabinsville, and to improve fish and wildlife habitat. The site is open to public fishing, and it gets plenty of use for this purpose. Since completion of the 73-acre lake in 1963, the site has been managed for fishing by the Pennsylvania Fish Commission. Fish were first stocked in 1964 and additional stockings have been made in following years. This is a "spot" that offers a variety of fish species to anglers. Some fine catches of black crappie, largemouth and smallmouth black bass, yellow perch, walleyes and bullheads have been made at the lake. Anglers are also harvesting channel catfish around 18-19 inches in length, and chain pickerel 18-28 inches long. In addition to these warm water fish, cold water species such as brook, brown and rainbow trout have also been stocked here.

Sponsors of a similar lake in the Mill Run Watershed of Crawford County proudly boast of Tamarack Lake and its multi-purpose uses. Local people started this small watershed project too, and local people made it work. The Crawford County Soil and Water Conservation District, County Commissioners, the Meadville City Council, and the Pennsylvania Fish Commission prepared an application for Federal assistance to install dams that would insure flood control protection to the city of Meadville from Mill Run. This wise decision was a critical step forward toward planning "a better community for tomorrow." The project was approved for construction in 1960; this involved development of a single-purpose flood control dam, and one multi-purpose dam for flood control and recreation.

The multi-purpose structure, completed in 1963, created a 556-acre fishing lake. When finished walleye, muskellunge, largemouth bass, crappies and bluegills were stocked. In addition to providing more recreation water, flood prevention benefits from this small watershed project amounts to more than $21,000 annually. Teamwork by local people, assisted by State and Federal agencies, helped solve the flooding problem, and it brought "pond type fishing" closer to more people.

Landowners and sponsors in the 7,814-acre Mill Run Watershed were ready, willing, and able, to get recommended soil and water conservation practices planned and applied. More than 90 percent of the land in the watershed is presently under agreement with the Soil and Water Conservation District. This helps to maximize soil protection. Installed land treatment practices include contour and field stripcropping, pasture planting and improvement, diversions, closed and open drains, and plantings of trees and wildlife shrubs. Applied conservation on the lands draining into Tamarack Lake is improving water quality and this is a vital factor in fish habitat enhancement.

Sound land use and treatment is an important part of any small watershed project—this fact cannot be over emphasized. It is one of the keys to better aquatic habitat for fish. Wise land management helps protect soils on the watershed by checking soil erosion, slowing up surface water run-off, preventing flooding, and by reducing siltation from lands draining into the lake site. In order to insure a high degree of watershed land protection, local sponsoring organizations encourage landowners to carry out recommended soil and water conservation practices on lands draining into the watershed lake.

A number of fringe benefits are also offered to sportsmen on watershed lakes.

Nature presents many opportunities on watershed lakes. Many people just enjoy relaxing by the water away from the hectic pace of life. Others go a bit further to explore the lake and its surrounding terrain with a keener eye. There are excellent chances to observe wild ducks, geese, shorebirds, songbirds, furbearers and even deer that are often attracted to aquatic areas. The thrill of seeing mallard ducks or Canada honkers winging their way over the lake or coming in for a splash landing is a sight to remember and it is an experience not easily forgotten.

Conservationists who make small watershed projects a reality through their coordinated teamwork deserve a "hats off" from the people they help.

IF YOU'RE ONE OF THE THOUSANDS OF FISHERMEN PLANNING A TRIP TO LAKE ERIE FOR SOME COHO FISHING IN THE NEAR FUTURE THEN YOU MAY WANT TO KNOW MORE ABOUT . . .

COHO LURES

—by Don Shiner

YOU'VE PROBABLY HEARD the big news. Smolts—young coho salmon—planted in tributaries of Lake Erie are due to return this fall as adults, with some expected to go 10 to 12 pounds and bigger in size. The pattern established in other Great Lake areas and elsewhere shows that cohos return by the thousands to areas where they were released. Word of their arrival will bring out unprecedented crowds of fishermen to Lake Erie. The big runs are expected to kick off a multi-million dollar business in Northwestern Pennsylvania, and develop into one of the all time great fishing stories—and industries—in the state.

The story, unfolded for the second consecutive year in Lake Michigan where smolts were planted, brought exuberant fishermen by the thousands to the coho grounds. Many launched boats, of every description, or fished from shore with all kinds of fresh and salt-water tackle to reach the schooled salmon.

Catches from schools arriving early in '68 were no match for those of the previous year due, some thought, to warmer water temperatures. But later, well into September when temperatures cooled down, catches climbed into the thousands.

Helping to keep the crowds excited in Lake Michigan were schooled cohos' habit of leaping and cavorting on the surface, often in the midst of boats or those wading off shore. Many methods were tried—some without much success—to catch them.

A topic of prime interest among cohoers then—and especially among those who plan to be there for the big fall runs in Lake Erie—are kinds of lures that will catch the silvery-colored fish. Reports out of Michigan indicate that



lures of every known brand and description, and some fresh off drawing boards, were put to use during the two annual runs. The answer is far from complete, with as many theories advanced as there are fishermen, but some patterns are emerging. Cohoers of Lake Michigan and the West Coast report success with Flatfish, Rapala, Rebel and similar minnow-shaped plugs, mostly silver in color, and hardware-type spoons as Svede Pimple, Canada Wobbler, Seneca Wiggler, Johnson Sprite, Ripl-Lure to name only a few, in nickle, copper, and black finish. Also mentioned are Mepps, Abu and other spinner-and-fly combinations.

Quests for flies, of various patterns, that are productive as hardware-type lures led some cohoers in the Michigan area to experiment with bucktails on 2/0 to 3/0 long shank hooks. One pattern, origin of which is thought to have come from the West Coast, that was reported a suitable salmon fly has red, white and orange as the predominate colors. Though it is too early to say conclusively that it will take cohos everywhere, including Lake Erie, the pattern is worth tying or having some made up for the fall occasion. Body is red wool yarn; wings, white bucktail; collar of hackle is bright orange—a pattern that hints strongly of a food fish bleeding profusely. A variation of the Royal Coachman, tied with long white polar bear hair wings, on big 4/0 hook and affixed behind spinners caught some cohos too according too reports.

Most worked lures and baits at moderate to shallow depths, or trolled.

Those who plan to give cohos in Lake Erie a go this fall should include some lures of the types shown here, and others of their choice, and fish them at moderate to shallow depths, or on bottom, usually by trolling, where the schooled cohos may stay depending on water temperature and weather, stormy or otherwise.

To say that the coho runs will be immensely exciting is truly an over simplification—particularly if you're among those catching them.

On the opposite page are some of the lures that have proved successful for coho elsewhere.

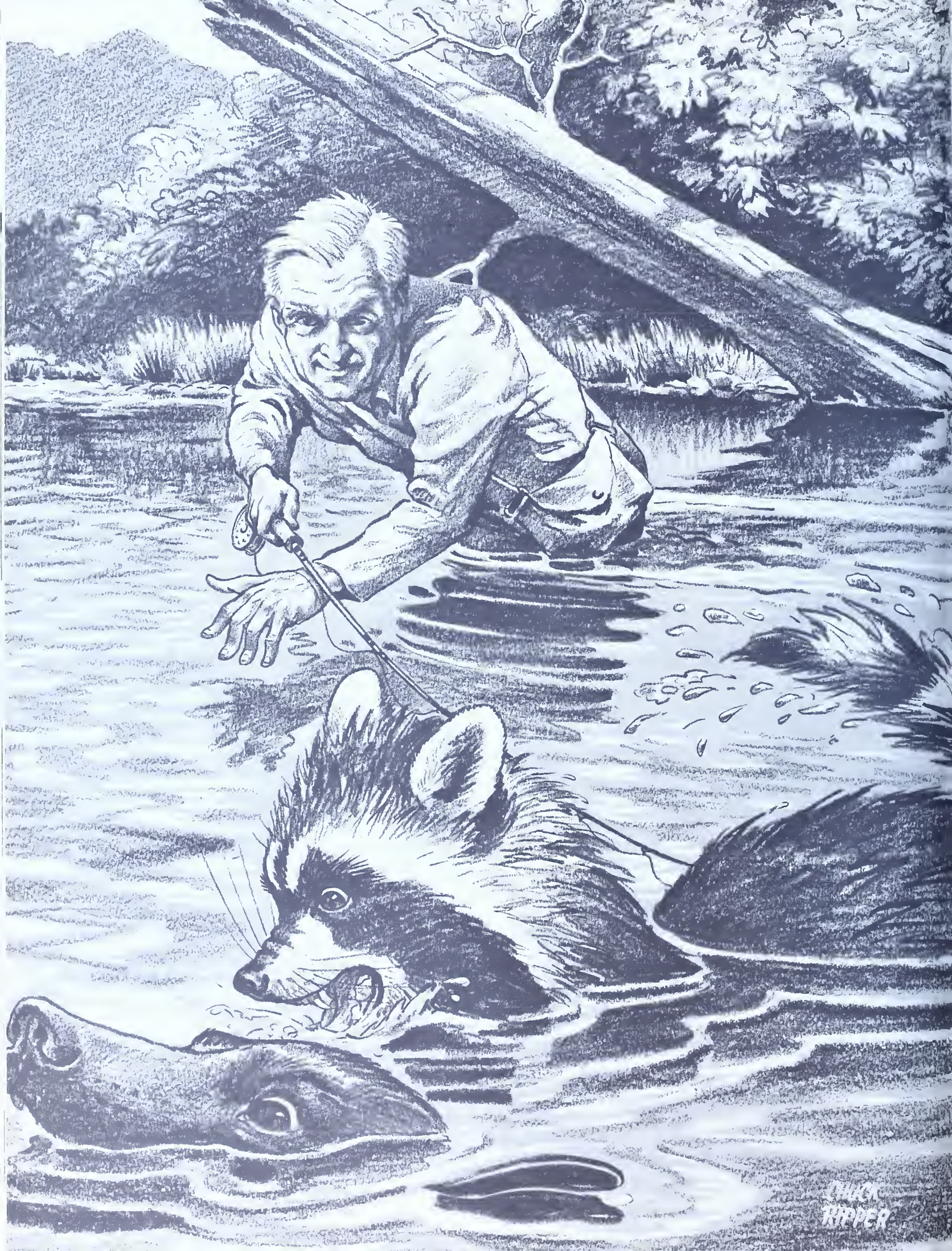
Lineup of lures successful for cohos include: Flatfish, Rapala, Reflecto-spoon, Svede Pimple, Svede Jig, Johnson Sprite, Ripl-Lure, Red-Eye spinner and fly, and bucktails.

One salmon fly that has emerged as a coho winner has red wool and tinsel body, bucktail wings and collar of orange hackle tied on 2/0 or 3/0 long shank hook.





SOME COHO returned to Pennsylvania tributaries in the fall of 1968, a year ahead of the rest of the run. On the left Waterways Patrolman Bert Euliano of Crawford County holds one taken in Pennsylvania Fish Commission nets while above one of Pennsylvania's most successful coho fishermen during the run last fall —Wilson "Doc" Beil of Erie—nets one of the several fish he took while surf fishing. He was using a silver lure of his own making.


BLACK
RIPPER

THE MASKED BANDIT OF ROEMER'S RUN

by Warren Shepard

HURRIEDLY I CRANKED THE BELL on the heavy old oak door. Water dripping from my sealskin cap seemed to find its way past my great-coat collar and probe icy trickles down my back. I regarded the growing puddles in the dim light of the vestibule floor and wondered what Mrs. Armstrong would say.

A golden beam from the hall light suddenly sliced through the partly opened door into the mist of the night.

"Here, boy. Come in here where it's warm and get those wet things off. Does your Maw know you're out such a stormy night?" I looked up into the kindly face of Mrs. Armstrong.

"Doc Sam said I could come over. Gonna show me how to make a feather minnow. I betcha I'll bring you lots of bass next summer. Betcha I'll catch 'em on my own fly hooks, too!"

Dr. Samuel White's aging housekeeper smiled. "Well, that's a long ways off," she said. "Right now, you get those wet things off. Those boots, too." I doffed my dripping gear and placed it in front of the big mirror on the old walnut coatrack.

That stormy spring evening of many years past hangs sweet in my memory. The year had beeen 1924—or was it '25? Well, no matter. It WAS a long time ago. And old Doc White has long since gone away to those happy bass rivers beyond the great divide.

"Ahoy there, young fella."

As I was pulling off my wet boots, the illustrious gentleman of the outdoors suddenly appeared, framed in the great arch leading to his den.

Dr. Samuel White had been our town doctor, though he worked no harder than necessary to keep us all well. He was also one of the most canny bass fishermen ever to wet a line in the tributaries of the mighty Susquehanna. He knew every bass trick in the book, and then some.

"You sure picked a drizzly night to come over. But glad you could make it. Come on out in the shop, and we'll look over some flies."

I padded along in my stocking feet behind the Doctor to his "shop." Junkshop is what it looked like to me. But, oh what junk! Creels, rods, nets and decoys adorned the walls. Reels, gun cases, boots and various tools and miscellania cluttered the benches. The floor was covered with an array of items including the frame of a stripped seventeen foot canoe. Among the chaos, fastened to one of the benches, was the fly tying vise, an old reflector coal oil lamp shining directly on the partially completed fly in its jaws. Feathers, thread, scissors, wax and other paraphenalia surrounded the vise.

"Mrs. Armstrong, get this boy some hot tea with a touch of lemon." Doc Sam reached under one of the benches.

"Now where the devil did that narrow minded woman put my rye this time? Ah, here it is." He came up from under the lower shelf, a glass decanter half full of amber liquid in his hand. I knew I was to have "just a touch for medicinal purposes."

The doctor climbed up on the tall bench stool and poured himself a couple of fingers of the strong liquid. "Boy," he told me, "if you're goin' to catch many bass next summer, there's a few things you got to know. A river's more'n skin deep. That skin's all you or I can see, but, remember this, it's the key to what's underneath. Watch your currents, white water and ripples; they'll tell you more'n you'd guess about bottom contours. And store this in your young noggin for sure. Wherever fast water meets slow, with some good bass cover nearby, you'll take plenty of fish."

Doc Sam's fish finding lore was supreme. He had a mental catalog of every type of water that bass prefer. Seems to me that he could take a good string, almost at will.

Of course, lots of this advice went in one ear and out the other, but I was at an impressionable age and must have retained some of the doctor's lore. The more I watched him fish, and listened to his wisdom, the heavier became my own string. As I reflect, I realize that what angling success I have had over the years has been due, not to any improvements in the mechanics of my fly rod technique, but resulted from the increasing ability on my part to recognize smallmouth water.

Sam was probably one of the first men to savvy the importance of stream temperatures in locating concentrations of bass. Sometimes he carried a laboratory thermometer in his vest, but usually he relied on an educated guess. On a new stream, he would plunge one forearm into the water; if it was too warm, he would look for a spring or deep hole; or if too cold, he would fish shallows and eddies warmed by the sun. Sixty-five degrees Fahrenheit seemed to be the magic temperature. Find water on a stream close to that temperature, and you were likely to find plenty of smallmouth.

"Sonny," he told me once, "locating your fish is the biggest part of the problem. Once located, all you have to do is cast your fly in his mouth." Sound simple? Maybe for Doc Sam, but not for me.

Near our town were several streams that offered excellent bass fishing throughout the summer. Great numbers of bass filled these streams during the annual spring spawning run. Many remained through the summer, enjoying the cooler water, but most fish returned to the

continued on next page

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MASKED BANDIT —



mighty Susquehanna once the spawning ritual was over. Later in the summer, as the big river warmed, many bass, including a good number of trophy fish, would return to our streams seeking cooler water.

In late summer, our streams were always low and clear. By careful wading, or stalking from the bank, the angler could locate many big fish by sight. The smaller fish, less than a pound and a half, were quite abundant and always evident. These youngsters liked fast, shallow water and were fairly easy to catch. The larger fish tried to keep under cover during the day. But often a tail, snout or dorsal fin was seen to protrude from the darkness of an undercut bank. Standard technique was to go after fish thus located at dusk with your favorite nine foot fly rod and a feather minnow. And these old mossbacks could be depended upon to guard their lairs against any intrusions including trespass by your drifting streamer fly.

I think it was in the summer of 1923 that Sam White had located the granddaddy of these summer run fish. He said it was the biggest bass he had ever seen in our streams. He had caught a glimpse of the fish by chance late one July afternoon and returned to the hole at dusk to have a try at the monster. On his first cast, he had hooked the fish, but as luck would have it, the gut had failed, and the big bass went free. Not to be denied such a fine prize that easily, the good doctor had spent several days making up double hooked, tandem, bucktail streamer flies and tying and testing tapered gut leaders. Finally, he was satisfied that his tackle could handle the fish. He would try for the big bass again, and how well I remember, for I was permitted to follow, at a safe distance, and witness the quest of a really big bronze-back.

Late one summer afternoon we cranked up the old Pope—Hartford, an old relic of a car built around 1908 but with amazing power and traction, and proceeded down an old rutted road to a dilapidated covered wooden bridge across Roemer's Run. The third member of our party was Rusty, a ten month old redbone pup from Doc White's kennel of fabulous coonhounds. Even before we drew to a complete stop, the big pup piled out of the back of the car in a fit of excitement. Doc let him race around for a while "to burn off some steam and get settled down." Presently, the pup relaxed and fell in at our side.

We were about a mile below the pool that held the old he-wop. Doc Sam was in no hurry; plenty of time was taken just to soak that leader well. We planned to fish upstream, have a cold supper, then hit the big bass hole just before dark.

Several hours and a half a dozen good bass later, the man sat down on the stream bank and beckoned me to join him. From his pocket he produced our meal. I was handed a big drumstick, a ripe tomato and a large piece of chocolate cake. It looked like Mrs. Armstrong's finest; I sneaked a little chunk of the thick brown icing to verify the point. Truly, a memorable supper this was. And the moment for action was fast approaching.

Further up the bank, we noticed Rusty working, his tail going like the brakeman's flag in a Chaplin movie and his nose snuffing scent from the damp ground like some spasmodic vacuum cleaner.

"A bunny," Sam ventured.

Then a deep, unearthly bawl issued from the big redbone pup and rolled across the Pennsylvania hills. He put his nose to the ground again, as if to bury his muzzle as deeply as possible into the wispy scent, and sniffed long and hard. Then he raised his head to the sky and, again let forth the clear, bell-toned bugle call of the American trail hound. The bawl was followed by another—then another —until the pup was working in a frenzy of excitement.

Dr. Sam walked over to where the dog had picked up scent and saw the unmistakable "miniature hand print" in the mud. Not really so diminutive, the track was fully three inches across—a monster raccoon. Sam wondered what the big coon was doing out this early in the evening and hesitated. Should he return to the house for his old dogs? The pup was untried. The work at hand, though, was the big bass. The raccoon could wait.

After a few moments, Rusty had taken the track out of hearing up the river. In the stillness of that summer afternoon, we held our breaths and strained our hearing. Ever so faintly, we periodically could hear that pup telling the world he was still on the trail.

"Sounds like that coon's headed up into Kemp's Hills west of Little Roemer Fork," Doc Sam said. "That pup thinks he's right smart now, but when Mr. Coon gets him on dry ground in those hills, it'll be the end of that little race."

We finished our supper and made our way upstream to the big hole.

This pool was majestic: about twenty yards wide and perhaps a hundred long. It was shaped like a giant cream pitcher, and near the upper end, water poured in the spout causing gentle ripples across its surface. Near the middle of the pool, close to our side, was a great gnarled chestnut stump, its multi-ringed face peeping out of the dark water like a rising harvest moon. Branches, roots and various snags could be seen emanating from the submerged portion of the stump. Surely, this treacherous snag was the lair of the monster bass. But this late in the evening, he probably had left the shelter of the snag and would be at his dinner table, in the deep water, just below the rapids that entered the head of the pool.

"Boy," the doctor ordered, "get yourself a long pole from those woods and wait by that big snag. If ol' bass tries to run under it, you poke 'im, quick." Doc Sam waited while I found a stout sapling. Then, in a crouched position, he crept behind a bushy dogwood near the head of the pool.

His big H. L. Leonard rod went SWISH! SWISH! SWISH! SWISH!

I saw the red and yellow streamer settle gently to the water and tumble down the rapids into the deep pool. As the line straightened out, the doctor imparted a gentle twitching action to the tip of the long split bamboo rod. I imagined that pulsating, vivid colored, deer hair minnow as it entered Mr. Bass's view.

"STRIKE." Dr. Sam jumped up from behind the bush and let out a war whoop as his rod bent double.

It looked from my position like the bass was charging upstream into the rapids. But things happened so fast, the next thing I knew, here came the line downstream, slicing water and headed straight for my stump. I jumped up and down on the bank, yelling and beating the water with my long pole.

"Atta boy," the doctor called encouragement as he ran toward me, trying to regain line, "keep him away from there."

Success. The big fish turned away from the stump. He sulked a moment in deep water and then made a scorching run toward the tail of the pool. The doctor gave chase, as his reel sang that wonderful music. When it looked like all was lost, and that the quarry would gain his freedom in the treacherous rapids below, the awe inspiring run stopped. The fish sulked at the tail of the long pool, probably reluctant to leave his summer home.

"He's not done yet, partner," the doctor called. "Keep a good guard on that stump, and I'll try to move 'im back to deep water."

I stood my ground, as the doctor eased to a position below the fish and slackened the bend in his rod somewhat. Slowly, the big bass began to move back upstream.

I called to the doctor, "I hear Rusty." I could hear the faint bawls of the big pup, still on the trail. The main sound, though, was the gently clicking reel as Mr. Bass stole line. The click increased to a buzz, then a scream with the fish's accelerating run. Line sliced past me as the fish headed for the upper riffle again. That fish must have traversed the entire length of the pool in a matter of seconds. The poor doctor was racing upstream now, trying to regain lost line. But the fish was too fast; at the riffle it turned back downstream again and headed straight for me. A big belly of slack line appeared on the water. I heard the doctor furiously cranking his reel.

"WATCH HIM. HE'S HEADED FOR THE STUMP."

Again I yelled and beat the water. With a sinking feeling, I saw line disappear into the snag. I poked and probed with my pole. Then, I felt the leader. And I felt the fish in great vibrating pulses. My pole would not pull free.



Bass, leader, pole and snag were all tied up in one miserable knot. But he was still there; I could feel him move. By now, the doctor had gained my side.

"I can see him," he said. "Let's give 'im a little time 'n maybe he'll work free." It was an obvious standoff for the moment; we rested.

"EEEEOW, EEEOW, BOOOW." It was the redbone pup.

"Boy, listen to that pup holler. He must be sight runnin' Mr. Coon. And they're heading back this way." The doctor was smiling and visibly excited, his hunter's blood warming to the sounds of the trail hound.

Just then, a streak of fur shot across the clearing at the head of the pool and into the water. The big, gangling pup was not five steps behind and never broke stride as he splashed into the pool right on top of Brer Coon. Immediately, I was again aware of the big bass as he fought for freedom upon entry of the new intruders.

A furious battle commenced at the head of the pool. Dog, coon and water seemed churned into a seething mass

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EARLY MORNING and late evening are the times when popper-fishermen boat into ponds to try for bass (above). Double mileage from the trout rod can be had by putting it to work on bass for some popper fishing (below).

Poppin' Cork . . .

GREATEST GAME In The WORLD

by Don Shiner

THERE ARE MANY WAYS TO CATCH BASS but, one way can drive you into a nervous wreck. It's poppin' cork. Those susceptible to nervous strain had better not try it.

The game is to drop a popper-fly near the lair of bass —lily pads, weed beds, stumps and sunken logs or brush-piles. One never knows precisely when old bucketmouth will boil up and grab it. And the waiting is pure painful. You remain ready, but when that moment comes you seldom are. It almost makes you jump out of your boots when the spot beneath the cork-fly boils over like a pot. It gets your heart to pounding like a battery of kettle drums. Over and over you tell yourself that it's much too punishing to continue enduring this excitement but, you do. It's impossible to stop until, around twilight, hordes of hungry mosquitos finally drive you off the pond. There's no more exciting way, really, to take black bass.

Small and largemouth bass around the globe respond to cork-ties. You can catch them in South Africa, Asia,



Europe, parts of South America and other far off places, but there're few better places than here in Pennsylvania. Proof of this is found almost any evening during summer months by poppin' corks for bass as shadows lengthen, wind dies down and water grows mirror-smooth.

This "fly-fishing" for bass is a very flexible game. Old timers often point out that it doesn't require expert skill. Most rods—fly rod, spinning or long cane pole with line slightly longer in length—will do the job of dropping cork-ties near cover that bass prefer. As rings widen and disappear, and the cork floats with the tranquility of a trout fly, twitch the rod tip slightly to cause fly to bulldoze into the surface and echo back the sound of a frog grunting. It's langauge that drives bass mad.

A partner and I often spend evenings during August poppin' corks for bass in a small lake in northeastern Pennsylvania. We launch our boat and paddle quietly into coves to cast popper-flies into the shadows lengthening out from the shoreline. We half expect bass to boil up any second from that dark water. We need only to drop the popper near, say, a sunken log and take our eyes off it for a split second to have it happen. The spot beneath the cork explodes and a bass tail-walks half the length of the cove. Despite the repetition, it always gets one to shaking badly.

We usually catch several bass and miss that many more between us before darkness closes in. Finally, we are relieved of the tension as we pack up our gear and drive home, once again convinced that poppin' cork for bass is the greatest game in the world.



LANDING PLENTY of nice bass is the reward of popper fishing on Pennsylvania's many good bass waters (above). Popper fishermen will find a variety of sizes and shapes of poppers available for the job (left) and will probably find plenty of opportunities for discussing which ones work best while gathering around the camp kitchen table near their favorite bass waters (below).



PART III—CONCLUSION

To Trout —With Love



by R. T. Trimmer

BARRING CERTAIN HYBRIDS, the Pennsylvania Fish Commission offers the anglers in our state a selection of four trout species upon which they may practice their recreational wiles. These four primary species include: the brown trout, the rainbow trout, the brook trout, and the lake trout. Although the difference matters little to the angler, only the brown and the rainbow trout are really members of the trout species for certain. The brook trout is actually a member of the char family; while the continuing studies on the lake trout offer some doubt as to which family it belongs. For the time being, biologists have grouped this fish with the chars.

According to biological standards, Pennsylvania lacks a native trout. Only the brook trout and the lake trout are really natives of Pennsylvania. Today's brown trout is a descendant of several European strains, primarily the German brown trout and the Scottish Loch Leven. The rainbow is an immigrant from the American Northwest, a descendant of the Pacific salmonoids.

However, all trouts and chars are members of the family *Salmonidae*, the salmon family. The salmon family is migratory in nature and, relatively ancient fishes, like the sharks, with a soft or cartiliginous skeleton and cycloid scales which, in some of the trout and chars, are so small as to be almost unnoticeable. Another, and almost unmistakable relationship, is the appearance of the adipose or fleshy, unrayed fin situated between the dorsal and caudal fins of all Salmonoid species.

The trouts, like true salmon, have teeth on the roof of their mouths and dark spots on lighter haloes; while the



To Trout —

chars, further removed from the main trunk of the family tree, have no teeth on the roof of their mouths and bear light spots on dark. Bearing these facts in mind, a study of the more detailed descriptions of the Pennsylvania trout, which follows, may show why there is some doubt as to the family grouping of the lake trout.

THE BROWN TROUT

Salmo trutta, crossbred from German and Scottish strains introduced during the late 19th century, is perhaps the smartest, toughest fighter of all the Pennsylvania trout. Primarily twilight feeders and fall and winter spawners, the brown trout was at first introduction, considered a scourge and a pest.

Accustomed to the simpleminded gluttony and lightweight play of the little brookie on his soft gut leaders and wet flies, the turn-of-the-century angler was terrorized by the newly arrived dreadnaughts who either ignored his dunked offering or slashingly grabbed it for keeps. Indignant at this intrusion into his beloved brook trout's waters, the fly fisherman began to complain that brook trout water should be kept for brook trout and that these new "trash fish" might well have remained on the other side of the Atlantic.

However, patience, perseverance, and a liberal helping of swallowed pride soon brought these men to respect, if not love, the brown's intelligence and fierce, tug-of-war fighting spirit.

Easily recognized with its deep brown back shading to bright orange-yellow on the underside, and its freckling of brown and orange spots surrounded by pale blue and green haloes, the brown trout will average one to five pounds and upwards of ten inches in length. The rod and reel record for brownies is 39½ pounds.

THE RAINBOW TROUT

Transplanted from its native northwest throughout the United States, with the exception of the southernmost sections of the Gulf States, *Salmo gairdneri* insisted on fast, rough water. Given the slightest chance, the rainbow will attempt to migrate to the ocean where he will acquire the blue-gray tinge that gives him the name "steelhead" in the Pacific drainage. Easily the most spectacular fighter of the trouts, the rainbow endears himself to the angler with wild tail-walking leaps and runs.

Olive backed, with deep pink and light blue stripes along his sides, and liberally spotted with dark green and black, the rainbow has been hatchery-taught to breed in early fall. He is an eager fly eater who will average one to six pounds and attain a maximum length of about 42 inches. The recorded rod and reel record for rainbows is 37 pounds.

THE BROOK TROUT

At his very best fried in butter, *Salvelinus fontinalis* is a rather poor fighter, due mostly to the fact that he is the smallest of the trout of Pennsylvania. However, if handled on the most delicate of rods, the little brookie will do his very best to remove himself from your influence, thus giving a satisfactory battle.

Highly susceptible to the least pollution, the brook trout is best found in the cold, clean headwaters of the northeast wilderness. He will eagerly attack any buggy looking lure brought near him, preferring however, wet flies and nymphs representing the Caddis Fly.

What the brook trout lacks in size and strength, he makes up for easily in glamour. Perhaps the most beautifully colored freshwater fish in the world, he blends from an olive-brown back to a rich red-gold belly. His sides are vividly spotted with light red and blue and each red fin sports a white leading edge.

Although averaging only one-half pound and eight to ten inches in length, a Pennsylvania brook trout could reach thirty inches and could even break the record catch of 14½ pounds.

THE LAKE TROUT

A denizen of the Great Lakes region, *Salvelinus namaycush* prefers 45 to 50 degree water and is willing to dive to four hundred foot depths to obtain it. Most of today's stock of lakers are probably descended from late 19th century stockings of the lakes of northeastern Pennsylvania.

Spawning along lake shores in early autumn, the lake trout with his gray-green body speckled with pale green, will attack flies and large wobbling spoons with relish.

Averaging four to five pounds and reaching a possible, mighty, 51 inches from nose to forked tail-tip, the laker has a rod and reel record of 63 pounds to his credit.

MODERN CAMPING by DEL & LOIS KERR

LAUREL HIGHLANDS—

IN THE LAZY HUMID DAYS of late summer, when fish often lie back and sulk, the fisherman-camper's thoughts spin ahead to the cooler days of fall. He begins to plan camping trips to a "hotspot" for bass, pike or musky when the crisp cool air will stir the appetites of the big lunkers who are now resting in the deepest waters.

Just such a hotspot and one that is easily accessible is Lake Somerset, off Rt. 219, only a half-mile north of the community bearing the same name. Located in the heart of the beautiful Laurel Highlands of southwestern Pennsylvania, Lake Somerset consistently yields trophy-size catches of all warm water species.

The 253-acre lake is stocked by the Fish Commission with largemouth bass, muskellunge, northern pike and walleyes. There is also an abundance of crappies, bluegills, sunfish and yellow perch. Boat launching sites are provided as well as a concession handling boat rentals and bait. Under new Fish Commission regulations small electrically-powered motors may be used.

Located adjacent to the lake and only 100 yards distant is a fine private campground, Woodland Campsites, which is open from April 1 to October 31. Nestled in a wooded setting overlooking the lake are 75 well-shaded campsites. Fifty of the sites have electrical outlets and there is a modern bathhouse with deluxe facilities.

Foodstuffs and camping supplies are sold on the premises. A children's playground is available to keep the little folk happy.

In the hot summer months when most fishing has tapered off, you will enjoy visiting Woodland Campsites for a dip in the new underground, heated swimming pool, complete with underwater lighting, sliding and diving boards. A wading pool is provided for the little tots. A nominal extra charge is made for swimming privileges.

Reservations are not necessary but are advisable for holidays and mid-summer weekends.

The Laurel Highlands, one of the outstanding tourist areas of the state, abounds in scenic, recreational and historic attractions. Autumn, with its bright coloration, is a particularly fine time to visit this section of the Commonwealth. Natural beauty is found everywhere and many special events are scheduled annually.

If your trip takes place in late August you can take in the Somerset County Fair, Meyersdale, August 18-23. The annual Highland Games, an old Scottish rite, are held at Idlewild Park in nearby Ligonier August 24. Idlewild Park is one of the most attractive amusement parks in Pennsylvania. Story Book Forest adjacent to the park is a must if you have pre-school children.

September brings the spine-tingling thrill of a white water canoe slalom race at Ohiopyle, approximately 40 miles to the west. Ohiopyle is located on the Youghiogheny River north of the Youghiogheny Reservoir.

A lovely series of waterfalls provide a beautiful setting for Ohiopyle State Park, acquired under Project 70 and currently being constructed. Upon completion it will have a fine modern campground.

Youghiogheny Reservoir provides boating, swimming and water skiing. Primitive camping areas are located on the shores of the impoundment and near the spillway.

Old time country festivals also occur in September including the Flax-scutching Festival at Stahlstown, September 13, and the Farmers and Threshers Jubilee at New Centerville, September 11, 12 and 13.

Three outstanding events are annually scheduled for October. Who does not enjoy the glamour and suspense of a steeplechase race or the baying of the hounds in a fox hunt? Both are featured at the famous Rolling Rock Races held October 1-4 each year in Ligonier.

Also in Ligonier is historic Ft. Ligonier, which played a prominent part in the French and Indian Wars. It has been reconstructed to appear as it did in the day when early colonists stopped there on their way to Fort Pitt to rout the French. The museum houses a fine collection of memoralia of that important period in our history. Ft. Ligonier Days are celebrated October 10, 11 and 12.

Forbes Trail Camp offers tent and trailer sites with water and electric hook-ups. The private campground is located off U.S. Route 30, one mile northeast of Ligonier. The sites are in a grove of hardwoods.

For real oldtime fun, plan a visit to the Springs Folk Festival, Springs, Pa., October 3 and 4. Springs, located on Rt. 669, is a little community of approximately 300 inhabitants. The tiny town boasts a modern museum.

Demonstrations of all types of pioneer occupations and activities highlight the festival . . . such things as wool processing, spinning, weaving, grain flailing, shingle shaving, trough-hollowing, broom making and blacksmithing.

Other crafts demonstrated are quilting, rug-making, wood carving, pottery, metalwork, chair-caning, basket weaving and many forms of early art work. Tours offered are a sugar-camp in operation, an Amish-Mennonite school and visits to Mt. Davis, the highest mountain in the entire state. Mouthwatering Pennsylvania Dutch foods and baked goods may be purchased.

THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

RECEIVES AWARD

A LANCASTER COUNTY FISHERMAN who, unmindful of his own safety, swam to the rescue of six persons left floundering in the Susquehanna River when their small craft capsized last summer received one of the annual Olin Marine Safety awards this year.

Paul Martin, representing the Office of Watercraft Safety, Pennsylvania Fish Commission, presented the framed certificate to Gerald Edwards, forty-seven, of 1104 Lancaster Ave., Columbia.

On hand for the presentation was Capt. Charles E. Leising, Assistant Executive Director, Office of Watercraft Safety, who congratulated Edwards for his heroic deed and for the rescue efforts provided by his companion, William H. Thomas, fifty-nine, of 225 Fisher Ave., Middletown, Pennsylvania. Thomas and Edwards are brothers-in-law.



GERALD EDWARDS, CENTER, receives congratulations from Capt. Charles E. Leising, Assistant Executive Director of the Pennsylvania Fish Commission, Office of Watercraft Safety, as he receives the annual Olin Marine Safety award. The award was presented by Paul Martin, extreme right, representing the Office of Watercraft Safety, during a meeting of Flotilla 58, U.S. Coast Guard Auxiliary, at Columbia. Also on hand were, left to right: Ward Donohue, York, Division 5 captain; Joseph Forrest, Flotilla 58 commander; William H. Thomas, Middletown, who assisted Edwards; and W. James Enck, Lancaster, chairman of the Lower Susquehanna Safe Boating Council.

Edwards and Thomas were fishing from shore, near Washington Boro, one Sunday afternoon last July, when a 14-foot metal boat, occupied by three adults and three children, became swamped off shore.

Edwards, the father of five children, removed his clothing, swam to the overturned craft and began aiding the occupants who, by then, were in a state of panic.

Realizing the craft would remain afloat, Edwards urged the victims to hold onto the sides of the craft while he returned to shore to secure additional aid. Once ashore he tried stopping motorists but several passed him by before one came to a halt and offered assistance.

Edwards then returned to the swamped boat and continued to aid the panic stricken occupants into a rescue craft but the victim, a three year old youngster, apparently slipped from the grasp of one of the adults and disappeared.

SAILING—

Sailing isn't exactly my line but I must admit that it's gaining in popularity with several clubs, and classes of instruction, in existence throughout the Commonwealth.

Pennsylvania's larger lakes make excellent sailing areas and quite some time ago I received a letter from a resident of the western part of the state who is vitally interested in forming a sailing club on Lake Arthur which will eventually become a 3,225 acre body of water to form the nucleus of the new Moraine State Park in Butler County.

However, according to Stanley M. Shaw, of Portersville, who is more or less deeply involved in this proposal, it is still a bit of "wishful thinking" on his part.

Shaw, holder of the only privately owned tract of land adjoining the lake, is a school principal by profession and much too busy with his daily routine to spend much time pursuing the matter. However he has been in contact with several area sailors, many of them members of a Johnstown sailing club, who have indicated interest in forming a new sailing organization.

Lake Arthur, surrounded by an estimated four million people within a 26 mile radius, has the potential for attracting 100,000 visitors a week once the park is fully developed and would be an ideal spot for a sailing club.

However Shaw admits that he's "still in the dark" and has a number of unanswered questions on his mind.

For example: "What should a sail club consist of?" He's thinking in terms of buildings, services, accommodations.

"Could a sail club be owned by an individual?"

"What would an estimated financial statement look like?" (Costs, investments, anticipated income, expenses, gross and net each year for the first five years.)

Shaw, who has already prepared plans for a club house, also questioned the procedure required to obtain a charter, what class boats should he plan on having, and should membership be restricted to a particular area.

Although in a quandary, Shaw feels that now is the time to form such an organization provided there are enough people genuinely interested in taking some definite action and getting past the "wishful thinking" and talking stage.

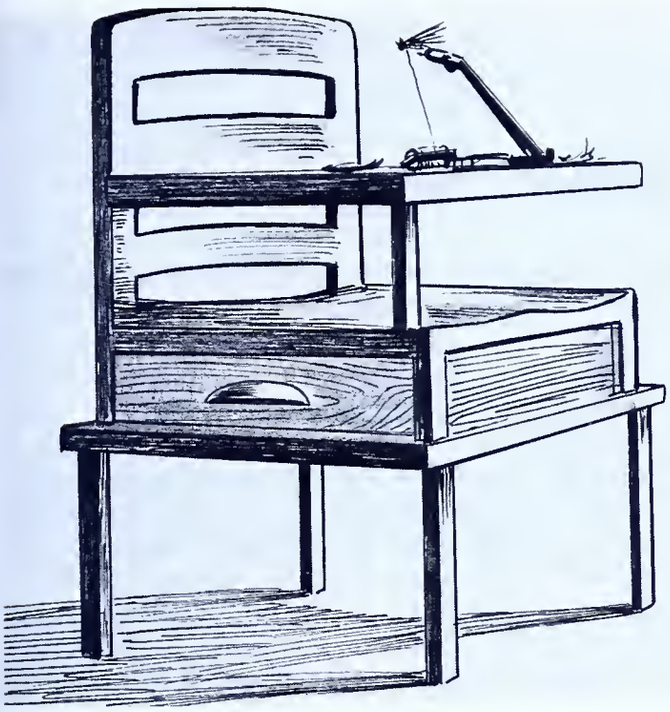
TO TIE — or not to tie

by
PAT
EISENHART



THIS MAGAZINE has devoted space to the fine art of fly-tying so frequently that I feel we should examine it from a woman's point of view. You will find no accompanying diagrams or numbered steps, just let your imagination run rampant.

Actually my first venture began as a dare. Jim (my husband) was tying flies one evening while I observed. When I remarked that it didn't appear to be difficult, the hoots and hollers were deafening. "Not difficult!! Fly-tying is an exacting art. Each pattern has its own color, feathers, hackles, etc." The discourse continued for a half hour ending with a trout's intelligence and how he spurns imitation. The fly must resemble the original insect to the 'enth degree or said trout will shun it. Now I wasn't born



yesterday. Fish are forms of lower life and while there are times I doubt man's intelligence (I didn't say woman's) trout are not that smart.

It was with trepidation that I approached my husband's fly-tying desk one day while he was at work. Not because I felt I lacked the ability for the task at hand but I've learned that "what's mine is his and what's his is his." Let me describe the desk. It's an old school desk, legs removed, with a bureau drawer attached underneath sitting on an old T.V. table. One day my girlfriend asked "What is it?" I told her it was Jim's fly-tying desk, a period piece. "What period?" she asked. "Early monstrosity" was my reply.

I surveyed the boxes of hooks and finally settled on a large streamer hook. I was after big trout, no puny nine incher for me. Tightening the hook in the vise I pondered on color choice. I wanted something bright, inviting and appetizing. I selected a gold tinsel body, wrapped about a yard around the shank and afixed the head with black thread. Then came the accessories. I chose yellow with orange sides. I selected a hunk of yellow maribou and began wrapping it on the hook, following with the orange. It looked rather slim and so I added another hunk of maribou. But now it seemed a little drab and so I added a dash of red to the underside, for a little savoir-faire, a sliver of jungle cock to each side and the final touch yellow eyes with a wink of black. Ah, beauty is truly in the eyes of the creator.

A little later I was in the yard and my neighbor asked what I was doing. Now this is a nice man even if he is a bait fisherman and I was proud to reply that I was "tying streamers." "Come on Pat, you're not that good," he chuckled. Huffily I stomped into the house and returned with my jewel to show him. He did smile (truthfully he roared for ten minutes) but he ordered a dozen. I couldn't believe it, a die hard bait fisherman buying my streamers, oh happy day.

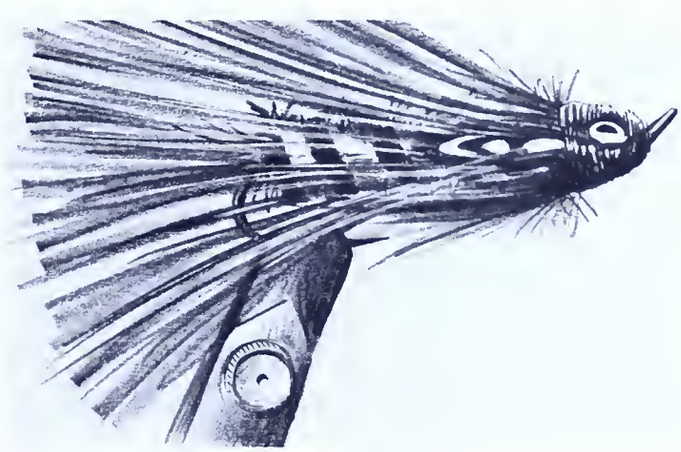
I quickly returned to the desk to begin the reproduction of "THE KILLER" which I had dubbed my streamer. First I thought I had better check one of Jim's patterns to give me new ideas. When the two were compared I was dismayed. Jim's were so neat while mine ————. My maribou hung about six inches over the hook. I quickly took the scissors and clipped some off but now it resembled Grandpop's old fashioned shaving brush and the head, oh my, the head was large enough to be a jig. The colors could only be described as a psychedelic nightmare. I could have cried. But I'm not the type to give up. Who's to say that a trout won't think this a tasty tidbit and oblige me.

I thought it best that I didn't show Jim my endeavor for I felt he would shatter my confidence with his humorous remarks. So our next trip to Fisherman's Paradise, I stayed close to him. "Where do you think you're going" he asked? I gave no explanation but proceeded to find a good spot. I felt I needed a larger stream for my fly—it weighed enough to seem like a sinker on the line. I spent the better part of the day working that streamer to no avail. Toward evening my trout hit and I had my fun for a half hour trying to land him. It was a beautiful 24″ rainbow and when Jim asked what I caught him on I showed him "The Killer." "You're kidding," he laughed. "Are you sure he's not foul hooked?" I was getting mad, especially when he said he figured out how I hooked that fish. "As the streamer went by the trout, the fish opened his mouth in surprise as if to say "What the heck is it?" When he clamped his mouth shut you had him." My only reply was "Jim you're making an enemy."

Now I figure, what does it matter what I caught the fish with, just so it was legal. I felt it proved my point, no fish is too smart for a good fisherman (or woman).

The next time my neighbor saw me he asked if I could make him another dozen of streamers. Seems his wife found they make cute shower curtain hooks.

I never tied another streamer after that, I felt I'd rest on my laurels but I kept that streamer as a reminder that you don't have to be perfect to be effective.





Notes FROM THE STREAMS

HARD BOILED?

■ While checking fishermen at North Park Lake, I met Ed Olson who related the following story. Ed was fishing at the lake when a lady started fishing beside him. She asked if he had caught anything. He replied a couple of trout. She asked what was he using for bait and he said cheese and eggs. To his amusement she calmly asked what kind of eggs, soft or hard-boiled?—***Waterways Patrolman PAUL B. SOWERS*** (Northern Allegheny County)

THANKS MR. McILNAY

■ Shortly after the opening of trout season this year John Barker, a ten year old boy from Bedford, called me. His telephone conversation was: "This is John Barker and I want to thank you for my being able to catch some trout. I am one of the boys who attended the Fish Commission School at the Elks. Through the teachings of the school I am now able to enjoy my fishing. Thanks Mr. McIlnay." —***Waterways Patrolman WILLIAM E. McILNAY*** (Bedford and Fulton Counties)

COLD HONEYMOON—

■ While working at the Cleveland Sports Show with Waterways Patrolman Bernard Ambrose, a Mrs. Mary Louise Stanley, Brecksville, Ohio approached us and asked some questions about fishing and boating in Pennsylvania. I explained our program and our wonderful magazine, the Pennsylvania Angler. She immediately reached into her purse and handed me $2.00 for a one year's subscription. When she was about to leave, she looked at both of us and stated: "Guess what; I recently got married and do you know where my husband took me on our honeymoon?" I looked at her and said "Where?" She smiled and said, "Presque Isle Bay and I caught 20 nice perch through the ice, but it was sure cold." She again smiled and said "Keep up the good work because your program is TOPS!"—***Waterways Patrolman JOSEPH KOPENA*** (Forest and Clarion Counties)

RELATIVE?

■ During the first week of trout season, I was talking to an angler along a stream and in the conversation he mentioned that he'd attended the last night of one of our Fishing Schools, and had enjoyed it very much. He then asked if I was related to Herb Pfuhl. I told him that I wasn't. He said he'd heard me on Herb's Sports Special Show at least two or three time a week and thought I surely must be a relative.—***Waterways Patrolman ANTHONY MURAWSKI*** (Cambria County)

DOWNSTAIRS POND!

■ A fellow spent all day digging a farm pond behind his house which sits below the pond. After spending all day digging the pond he relaxed in front of the T.V. set but soon to his surprise he heard his cat "meow" from the basement. When he went to investigate the trouble, he found his pet cat riding a log floating in the basement—which was full of water. His new pond had drained into his basement!—***Waterways Patrolman J. E. ANSELL*** (Mercer & Lawrence Counties)

NATURE'S FISHERMAN—

■ On Sunday morning, April 27th, while on patrol of Canoe Creek I had the pleasure of watching a real pro-fisherman at work. He had to catch a fish or go hungry. It was a large osprey. Like most other fishermen he had competition. A flock of grackle would dive at him every time he got close to the pond he was working. As a result he missed on 4 or 5 dives. Also like many other fishermen he decided to find a more secluded spot to do his fishing. Another pond upstream took his eye and after circling the pond twice, he made his dive. He came up with what looked to be a bluegill of fair size. I was in hopes he would pick a tree nearby for his table so I could watch longer, but he flew across a small hill and I saw no more of him. Watching this large bird was a real thrill!—***Waterways Patrolman CLOYD W. HOLLEN*** (Blair County)

SECOND CHANCE

■ While patrolling Lake Pleasant on April 28th Mr. S. E. Petersen, 1045 E. 7th St., Erie lost a rod off the dock at 10 A.M. At 12 P.M. he was fishing with his other rod and hooked into a line which belonged to the rod he had previously lost. Upon retrieving his rod and winding in the line he found a 10 inch rainbow trout which had pulled his rod in the lake.—***Waterways Patrolman JAMES R. CARTER*** (Erie County)

TRAVELING CATFISH

■ Devon Fraley recently caught a white catfish at the Raystown Dam in Huntingdon County. Mr. Fraley noticed a tag on the fish and called me to secure some additional information. I knew we had not tagged any fish in this impoundment so I decided to check the records. I found that this 21½ inch, five pound "traveling catfish" had been tagged in Shawnee Lake, Bedford County in April of 1966. Total distance traveled was approximately 100 miles. —***Waterways Patrolman JAMES T. VALENTINE*** (Huntingdon-Fulton Counties)

BIG GAME CATCH

■ On the 1969 opening day of trout season I was on a special assignment on the Yellow Creek area of Bedford County. District Game Protector Thomas and I were told this story: A young boy was fishing below the Fly Fishing Area at the mouth of Maple Creek when he thought he had a snag. After giving his rod a sharp heave-ho and the line gave a little, he was finally able to retrieve his line, although his rod was bent almost double. When the boy finally landed his catch he was amazed to find the head and antlers of a four point buck and a six point buck held together with a piece of wire. G. P. Thomas and I got a real laugh at our problem. Would the boy need a fishing license or a hunting license and also should he try for a Junior Citation or the Triple Trophy?—***Waterways Patrolman JAMES R. SMITH*** (S. Allegheny County).

LITTER

■ While on stream patrol this month I checked an elderly couple with six nice trout. I conversed with them a few minutes while they picked up their equipment to leave. The lady picked up some beverage cans and other litter that I knew was not hers. She said something about litterbugs, some of which I did not hear too well. The part I did hear was "the next thing you know this place will be closed to fishing." I believe littering has been a big factor in the closing of many fine fishing areas.—***Waterways Patrolman RAYMOND HOOVER*** (Tioga County)

"WOAH FISH"

■ Mike Carlton, Outdoor Editor of the Punxsutawney Spirit, phoned me early in March and asked if he could photograph fish stocking operations preseason. We made arrangements to meet for the stocking of East Branch Mahoning Creek. The results of this coverage was a full page picture story in the Punxsutawney Spirit with one shot of Special Patrolman Ken Mottern of Sprankle Mills scrambling under a pick-up truck after a trout which had flopped out of the bucket. The caption under the photo naturally read: "WOAH FISH!"—***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County)

JUST REHEARSING!

■ While Deputy Game Protectors John Hemerly and Earl Nothstein were patrolling the Ontelaunee Creek on the first morning of trout season, they came across a boy who was fishing at 5:30 A.M. When DGP Hemerly told the boy that the season didn't open till 8 A.M. the boy said that he was "just rehearsing." At this point DGP Hemerly asked to see the boy's license but the boy replied that he was only 15 years old and didn't need a license to fish. DGPs Hemerly and Nothstein decided to take the boy's name and address so they could check his age. Later that afternoon they were on State Lands #205 when they got a report of a field fire that was raging out of control nearby so they proceeded to the fire. Shortly after arriving at the fire, they saw the fire truck coming to the scene with a long string of cars following. Guess who was driving the first car behind the fire truck? The boy who was "only 15 years old and just rehearsing!"—***Waterways Patrolman JOSEPH K. HOUCK*** (Lehigh County)

BUCKETFUL ONLY

■ While waiting for the arrival of the fish truck at Brockway a woman came over to the car and asked for a bucket of fish for a small run in back of her home. I explained that fish had to be stocked in approved waters only. She argued that no one would miss a bucket of fish. After 15 minutes of polite but fruitless arguing on her part, she turned to another woman with her, let fly with a barrage of four letter words.—***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County)

TIP OF HAT!

■ Licking Creek in Mifflin and Juniata Counties is most remote and difficult to stock, particularly early in March when, with general bad weather and snow on March 2, we set out to stock it. Andy Dunn and Warren Stump, two of Juniata County's dedicated sportsmen, hustled up five 4-wheel drive vehicles and really gave Licking Creek one of the best stockings ever. A tip of the hat to the fine cooperative spirit of Juniata County sportsmen!—***Waterways Patrolman RICHARD OWENS*** (Mifflin and Juniata Counties)

KNOTHOLE FISHING—

■ The following was recently told me by a fisherman. It seems there is a certain water jack dam in Lancaster County that has a knothole in the center of it and there are some good pockets beneath the knothole. Well this gentleman just happened to drop his bait or lure through the knothole. Wham—right off he had a trout—with the trout tearing out from under the water jack dam and heading downstream. He says he landed it!—***Waterways Patrolman SAMUEL W. HALL*** (Lancaster-Lebanon Counties)

PRACTICE

■ The thrill of the opening day of trout season acts in many strange ways as I noted the evening before the opening day. On my way to pick up Special Waterways Officer Bogart after dark the evening prior to the 12th I passed a street light on Portage Street and noticed a young girl about 10 or 12 years of age casting and retrieving her line, practicing with a spin casting pole!—***Waterways Patrolman STANLEY HASTINGS*** (Cameron County)

THREE YEAR RENEWALS

■ Selling subscriptions to the Angler I have noticed quite a number of the renewals are for three years instead of one year like they had before. Shows they like the magazine!—***Waterways Patrolman WILLIAM E. McILNAY*** (Bedford and Fulton Counties)

Classroom for Fish Culturists



COMMISSION PERSONNEL of the Pennsylvania Fish Commission's third school for Fish Culturists at the H. R. Stackhouse Training School examined tissue through microscopes (above) as well as listened to lectures by such well-known Commission biologists as Bob Hesser discuss fisheries problems (left).





DISSECTING VARIOUS species of fish was included in the extensive training program (above) while close examination of results were compared by those attending (below).



SELECTED FISH CULTURISTS from throughout the state gathered at the Fish Commission's H. R. Stackhouse Training School at the beginning of this year to attend an intense program of fish culture studies.

Culturists, foremen, and superintendents were selected on the basis of mental and technical abilities, aptitudes, and performance.

The school, the third of its type given in Pennsylvania, may well become a regular occurrence in the state. The teaching staff is composed of biologists of the Benner Spring Fish Research Station in Bellefonte, the Fish Commission's executive staff and department heads, with a host of professors and prominent fisheries personnel throughout the country scheduled as guest speakers. The subject matter ranges from limnology, water chemistry, microscopy, pathology, aquatic botany and hatchery construction, to fish rearing and production and management of hatcheries and waterways. After a preliminary several weeks of intense scientific training, the students are taught the various aspects of cold water and warm water fishery techniques. Students live, study, and attend classes at the school for the entire six weeks. Classes and tests occupy a major portion of the day; with the remainder used for study.

The purpose of the school is manyfold: (1) it introduces the student to all the aspects of his position, (2) explains methods and reasons for their use, (3) answers the many questions in his mind about nature, the life sciences, and his work, (4) provides a good background for him to grasp and use the new concepts and methods introduced in the field and enables him to progress with them, and (5) keeps him abreast of the newer developments in fishery science.

by / MICHAEL G. KOBULARIK

photos by:
Michael G. Kobularik
and
Cecil R. Houser

REVIEW—

"SIMPLIFIED FLY FISHING"

(Harper & Row, Price $4.95)

No sport, either in the participant or spectator field, has enjoyed a greater volume of high quality literature than angling in general and fly fishing in particular. But it seems to me that there are two chinks in the otherwise all inclusive armor of recorded anglerdom. First, most angler-writers fail to combine conservation preaching with their teaching of destruction. Second, we writers have a strong tendency to skip over the basic and the simple in our haste to plunge into the technical. Hence the need for a book which will inspire the making of fly fishermen and conservationists at the same time. In "Simplified Fly Fishing" by S. R. Slaymaker, II, a talented wordsmith, American angling literature now has such a volume.

The book is written for the nonfisherman who has an interest in becoming a fly angler; the bait fisherman or spin caster who has not tried fly fishing because he accepted the idea somewhere, somehow that it is too difficult to master; the periodic fly angler who is looking for tested tips for greater action and enjoyment while on his occasional outings; and, giving, from the regular angler to a relative or a friend that he would like to have join him as a fishing companion.

Emphasis throughout is on the skills the neophyte is most interested in acquiring in order to increase his rate of personal satisfaction.

This is the basic book of the fly rod; basic as a guide to *modus operandi* and basic as a part of an angling library. Important, too, is the fact that this is the work of a dedicated flyrod man and a conservationist who also is an accomplished writer.

The many superb illustrations are by a person extracted from the same mold, outdoor artist, Ned Smith.

An appropriate and engaging forward has been supplied by that veritable Dean of American fly angling, Sparse Gray Hackle.

—Charles K. Fox



WINNERS/

TROPHIES and prizes were presented to the winners of the Lynn Rosenkrantz Memorial Essay Contest at the Twenty-Second Annual Susquehanna County Sportsmen's Federation Banquet at Kingsley last spring. Receiving awards were: First prize—Cathy Evans, Nicholson; second prize—Todd Hall, Susquehanna, both seated and standing, Margaret Houlihan and Joann Radicchi both from Susquehanna, tied for third place; and Linda Price, Susquehanna, honorable mention. (photo by Walter Lazusky)

BOATING COUNCIL WINS NATIONAL AWARD

THE LOWER SUSQUEHANNA Safe Boating Council, organized in the Spring of 1967 to promote safe boating practices, won a citation in the national 11th annual Gold Cup Awards for Boating Safety program.

In a letter to Earl C. Snyder, Millersville, retiring president of the council, Robert S. Hansen, representing Keikhaefer Mercury, Fond du Lac, Wis., sponsor of the Gold Cup Awards, wrote that "the winner, by a narrow margin, in your category was the Louisville, Kentucky Power Squadron."

The Gold Cup program was inaugurated in 1957 to recognize the contribution to greater boating safety by communities, the press and governmental agencies.

In receiving honorable mention the Lower Susquehanna Safe Boating Council becomes the second Pennsylvania organization to receive a citation since the Gold Cup awards program began.

The first was the Office of Watercraft Safety, Pennsylvania Fish Commission, which received a first place award —a Gold Cup—in recognition of its safe boating program.

Members of the council, which serves a six-county area, and the organizations they represent are:

Earl C. Snyder, U.S. Coast Guard Auxiliary, Flotilla 52; W. James Enck, Susquehanna Yacht Club; Dean E. Klinger, Office of Watercraft Safety, Pennsylvania Fish Commission; Robert G. Miller, Department of Forests and Waters; Robert L. Lenseth, Lancaster Chapter, American Red Cross; Carl P. Lefever, Safe Harbor Water Power Corp.; Walter G. Seifried, Pennsylvania Power & Light Co.; Ronald M. Close, Outboard Boat Club of Lancaster County; Roland E. Bellacker, Pequea Boat Club; Cpl. Joseph L. Monville, Pennsylvania State Police; and Leon R. Sachs, Susquehannock Power Squadron.

LICENSE BUTTONS NEEDED—

Pennsylvania Fish Commission Waterways Patrolman Sam Hall of Lancaster County is in need of two old fishing licenses in order to complete a collection. Mr. Hall states that he now has a complete set of the licenses except for the years of 1924 and 1932.

Any Angler readers wishing to donate either or both of these licenses to Mr. Hall's collection should contact him at: **R.D. 2, Box 267, Lititz, Pa. 17543; phone 717-626-2542.**





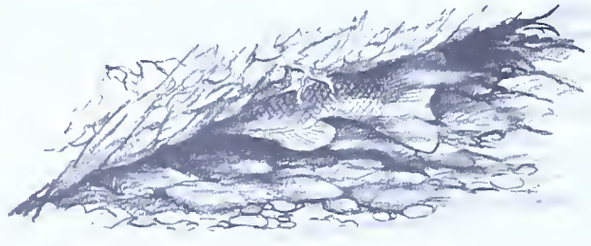
RECEIVE AWARDS/

THE PENNSYLVANIA State Fish and Game Protective Association presented awards to Special Waterways Patrolman Ben Hecker and well-known conservationist Virgil Kauffman at the group's annual banquet in April. Hecker, pictured left receiving a "Certificate of Recognition from Association president George W. Schneck, was cited for his work in conservation activities. He has served the Pennsylvania Fish Commission as a special officer for 16 years.

Kauffman, pictured right with Mr. Schneck, received the Association's annual Gold Medal Award for his conservation efforts. Well-known for his work in minerals resources investigation and exploration and the protection of mineral resources and a member of the Explorer's Club recently earned world-wide fame as leader of the Academy of Natural Sciences' expedition on which Captain Cook's cannons were located and recovered near Australia.

continued from page 15

MASKED BANDIT —



several feet high as they fought their way downstream. Doc Sam was calling encouragement to the pup, but Mr. Coon was having the best of it. As the fighting pair entered deeper water, somehow, the big raccoon got astride of Rusty's neck, fighting, biting and pushing the young hound's head underwater.

Sam White, fearful for the promising pup's life, bailed off the bank into the stream, wielding his fly rod like a lance and poking the coon for all he was worth. I saw the prized rod bend double, then split. Three fighters, then as they reached the stump and the tangled bass, four assailants churned the water. I lost sight of the struggling bass as great plumes of mud stirred up by the furious activity clouded the waters. The sapling vibrated and jerked violently in my hands. Suddenly, the bass broke water with a mighty leap. I saw the leader break. The multicolored streamer still glistened in his jaw as he scurried away to freedom.

Then, the yelping dog was in the doctor's grasp, and the big coon was swimming off toward the far bank. Bedlam was over as quickly as it had started.

I pulled my pole free and gave the dripping doctor an assist from the cold water. He pulled a bleeding Rusty out onto the stream bank and flopped down with a great sigh. His smashed Leonard rod was grasped in a clenched fist, the broken stringers of bamboo bristling like a quill pig's back. There was no question about it; we were whipped, but good.

Finally Sam chuckled. "That darn red pup's gonna make it."

Well, that's the story of the big bass of Roemer's Run. We never saw or heard from him again. Doc Sam used to speculate that our near won prize never stopped going at the Susquehanna, but probably went "clear to salt, and spent the rest of his days in the peaceful marshes of Chesapeake Bay." At any rate, I'll wager that was the last time that fish came up Roemer's Run for a leisurely summer.—All because of that old "masked Bandit" of a raccoon that raided our fishing trip to Roemer's Run.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



THIRTEEN-YEAR-OLD Kirk Smith of Meadville and fellow fisherman Al Voorhies also of Meadville together hold the 47½-in., 37½-lb. musky Smith hooked while fishing near the causeway at Pymatuning this spring. He was using an eight pound test line when the fish hit.



GLENN KELLY of Belle Vernon holds beautiful 31-in., 6-lb. 2-oz. northern he caught at the Yough Dam to win a trophy in a contest sponsored there.



TEN-YEAR-OLD Joseph Yuhas of Wyoming holds a 24-in. lake trout he caught while fishing Harvey's Lake in Luzerne County. He was using a flatfish and drifting when it hit.



ANGLER FRANK REMPE of Scranton holds two big brown trout he caught at Lake Wallenpaupack this spring. They went 21 and 22-ins. and weighed 3 and 4 lbs. He used minnows and spin gear.



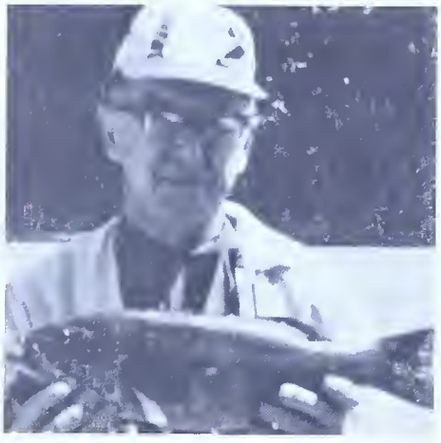
"BEGINNER'S LUCK" says fisherwoman Mrs. Pat Gauger of Pottstown as she holds her first trout—a 15-in. rainbow caught at Scots Run Lake in Berks County. She was using corn when it hit.



FISHERMAN Wilford Keel of Benton holds this 23-in., 4-lb. 2-oz. rainbow he caught while fishing Raven Creek in Columbia County. He used spin gear and worms. The gal is daughter Kathy.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



NORRISTOWN FISHERMAN Havard G. Cornog landed this smallmouth bass while fishing Lake Wallenpaupack. It measured 20-ins. Gear used, not listed.



BIG PALOMINO taken opening day by Lamar Troup of Beaver Springs. Fishing Middle Creek, he used spin gear and minnow for this 25-in., 6-lb, 1-oz. catch.



LARRY BARON, Shickshinny, holds 36½-in., 13-lb. musky he took through the ice at Lake Jean. Honorable mention in Musky Club.



HANOVER ANGLER Robert Overbaugh, 12, holds 27½-in., 3¼-lb. northern he caught from Codorus Creek in York County.



THIRTEEN-YEAR-OLD John Carney of Hawley (left) holds a 15½-in., 1-lb. 9-oz. black crappie he caught at Lake Wallenpaupack. Big rainbow—19½-in., 3½-lbs.—was taken from Muncy Creek by Michael Bayley of Picture Rocks (center). Thomas H. Fellows, Greensburg (right) holds 22¾-in., 6¼-lb. smallmouth landed in Trauger Lake.



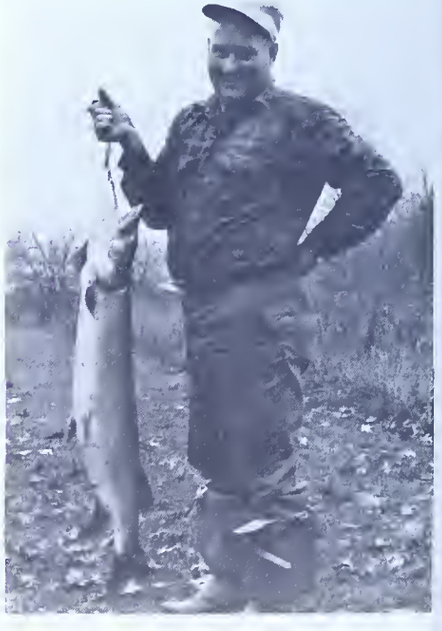
FREQUENT CONTRIBUTOR to the Angler, Steve Szalewicz, holds a 28-in., 9-lb. walleye he took on a tip-up while fishing Sandy Lake last winter.



THOMAS CURLEY of Binghamton, N.Y. holds 18¾-in. rainbow he caught while fishing Quaker Lake in Susquehanna County. It hit a nightcrawler.



BRUCE FLEEGER, 6, son of the Pennsylvania Fish Commission's Region III supervisor Clair Fleeger, holds 22¾-in. shad he caught fishing the Delaware River in Pike County. It hit a shad dart.



ROBERT JOHNSON of Mt. Jewett won a Husky Musky Club membership when he landed this 42-in. nearly 20-lb. musky from the Allegheny River near Eldred.







BIG WALLEYE, 31¼-in., 20⅜-lb. was taken by fisherman Harry Redline of Huntingdon (above) in the Raystown Branch of the Juniata. Bullhead—17-in., 2¾-lbs.—taken by Delbert Hollister, Springville, (first right) at Big Elk Lake. Philadelphia angler Michael Gaffney (far right) holds 19¾-in., 3½-lb. brownie from Wissahickon.



ALBINO brook trout, 11½-ins. taken by Don Young of Beaver County while fishing Brady's Run Lake.



JUNIOR Citation Winner Donald W. Weir, 14, holds 21½-in, 3¼-lb. rainbow he caught from Whipple's Dam.



LEON BURNS JR. of Jermyn caught 22-in., 4-lb rainbow fishing the Lackawaxen. Won him a Junior Citation.



NORTHERN PIKE caught by Delbert Hollister, Springville, measured 32-ins., 9-lbs. 13-oz. from Big Elk Lake.



FISHERMAN Edward J. Dimery, Farrell, landed 47-in., 34-lb. musky fishing Pymatuning Reservoir. It won him membership in the Husky Musky Club.





MT. PLEASANT fisherman Randy Clausner (left) holds 25-in., 5-lb. walleye he caught at the Yough Dam while 12-year-old Ronald Hatzell of Linesville holds 16-in. bass he caught at Pymatuning.



DUNCANON ANGLER Walter Gamble, 9, holds 26-in., 15-lb. carp caught while fishing the Susquehanna. It won him an Angler Junior Fishing Citation.



DAVID KENYON, 9, Mansfield holds 13½-in., 2-lb. perch he caught from Mill Creek. It won him a Junior Citation.



MARK SOLIDAY, 10, of Connelsville holds 21-in., 5-lb. 8-oz. bass he took at Yough Dam. He won a Junior Citation.



PAUL FISHER, 12, of Johnstown landed this 14¼-in. fallfish while fishing the Raystown Dam. He won a Citation.



EIGHTEEN INCH coho taken by Willard Lewis (with cigar and smile) from Harveys Lake. With him is John Misunas.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

MARIENVILLE

IT WAS LATE IN DECEMBER and the Allegheny National Forest was covered with a mixture of snow, sleet and glaze ice. It looked like a one-way trip down the hill to the Marienville Rod and Gun Club Cooperative Nursery. Four-wheeled vehicles crawled about looking for a handhold on the slippery surface. Later, the Bucktail Hotel, some miles away, seemed the better place for a discussion. So back to Marienville and over a few mugs of hot coffee, the nursery story unfolded.

Ray Snyder, vice president of the club, did most of the talking with emphasis on the feeding. Venison, venison, venison and more venison was the order of the day; and the trout were growing, growing, growing. According to club records, over a ton and a half of venison was ground and fed to the 10,000 fish in the rearing ponds during 1968. A sample month, November, illustrated the point. Over 258 pounds of venison was fed in contrast to only 17 pounds of dry pellets.

Source of the meat is essentially road-killed deer. The nursery is located in the heart of prime deer country and enjoys the cooperation of local Game Commission officials. Contributions of livers and carcasses during the hunting season are received and some soliciting of unwanted venison is done. One way or the other, there seems to be no problem in securing the quantity of meat needed. Club members have become quite adept at processing, grinding and packaging the venison to be fed throughout the season. Storage facilities are available and the club, in its five years of operation, has proved the point that venison will do the job.

The emphasis on venison is not the only unique thing about the club. Its feeders are a dedicated lot. Feeding is done twice a day most of the year with each man taking a weekly turn. For most of them, it is a 28 mile trip with weather conditions in the winter creating some special problems. This work falls on the shoulders of about 20 men although the club lists its membership in the hundreds. Many members are nonresidents, and most come from western Pennsylvania and Ohio.

Porter Gearhart, Forest Ranger, and Snyder are credited with finding the source of water. Other members contributed time in the search for a suitable site. Some years before, the area had been surveyed by the federal fisheries people with the idea of establishing a federal hatchery. The water source was considered inadequate for a large operation and the federal hatchery was established at Lamar on Fishing Creek instead. Water and other conditions were adequate for a cooperative project. Approval came from the Fish Commission and the first fish were placed in the long raceway in 1965. Incidentally, a special permit was needed from the federal foresters since the nursery was located on national forest ground. The permit was granted and the site is inspected by the Forestry Service at regular intervals.

Physically the nursery is divided into four long rectangular ponds with a fifth in circular form. The water temperature is excellent, running between 43 and 47 degrees year round. The trout grow; mortality rate is low; and there are few problems.

One of the problems seems to be predators—the human kind. The remoteness of the nursery makes this difficult to control. As a result of a heavy loss of fish in 1967, the club now stocks all of its trout pre-season. They had originally held a good many fish over for larger growth and trophy catches, but poachers made this an impractical thing. At the moment the club raises between



ED HUTH grinds venison for use by the club in feeding their 10,000 trout.

ten and eleven thousand fish, a mixture of brooks and browns, to legal size.

Some of the streams receiving Marienville fish include: Banks Run, Ross Run, Mill Stone, Spring Creek, Blue Jay, West Branch, the Salmon, Watson, Logan, Wolf Run, Hunter Run, East Branch of Spring Creek, Maple Creek, the Little Salmon, and Brush Creek. Several counties share in the cooperative fish with the nursery being located in Forest County near the junctions of McKean, Elk, Warren, and Clarion Counties.

Bill Summers chairs the club as its president and Boyd Ekis has handled the secretarial chores for some time. And that's about it for the administrative end of the operation other than to say that the officers expressed appreciation for the aid received from Bob Rankin, district Fish Commissioner and active member of the Potter County Anglers, in helping them get started on a successful project.

One more thing should be stated about the Marienville Cooperative Nursery and that is the fact that, whether they know it or not, the deer of the region are contributing to making *Casting with the Co-ops* a success in the Allegheny Forest area.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

From P. B., Havertown:

"My 12-foot Jon boat has a 45-inch beam, and I have six-foot oars. How far from the handle end should the oars be drilled for the oarlock pin?"

—We do not favor this type of oarlock, for several reasons. First, drilling weakens the oar at the point of maximum stress; secondly, if you guess wrong the first time it involves drilling another hole, and thirdly, with this type of oarlock you cannot "feather" or twist the oar on the return stroke (a trick you will find very desirable if you do any rowing in choppy water). Get a set of closed circular oarlocks, and four tight rubber keepers that slip on over the oar shafts. This arrangement will permit feathering the oars, and allows for adjustment as well.

From W. D. M., Pittsburgh:

"How can I eliminate some of the engine noise on my 26-foot hardtop cruiser? At cruising speed or better, the noise level at the helm position is unbearable."

—An efficient muffler is the first thought, of course, but a great deal of your problem is machinery noise. Try a non-water-absorbant mineral acoustic tile cemented to the underside of the cockpit sole. Careful alignment of the engine and shaft will help, and you can purchase an intake silencer to quiet the rush of air into the carburetor. Hunting down and securing all of the many items which rattle will do wonders, and don't forget to apply acoustic material to the underside of the hardtop, as well.

From H. A. B., New Castle:

"Is is possible to live along the river in a houseboat and not have to pay any taxes?"

—Your idea is alright, as far as it goes, but you will have to have someplace to tie up your boat. If you buy a piece of riverfront property, you will of course have to pay tax on it; if you rent a location, then the owner will charge you rent and pay his taxes out of this. If you have income, it will be taxed anyway. The ideal situation would be to invest enough money in tax-free municipal bonds that you could live off the income, then find a mooring where the property owner would not charge you any rental. It's theoretically possible, but not likely.

From F. A. K., Cresson:

"My 35-hp Evinrude frequently floods out when I try to start it, and at times I have run the battery down trying to get it going. I know that over-choking causes the flooding, but if I don't choke the engine at all when it's cold, it still won't start. Is there some easy way to get a flooded engine started?"

—Very simple. Just pull the fuel line connection off the engine, and crank it over a few times. It will start and run for a minute or so on the fuel in the carburetor, allowing plenty of time to replace the fuel line.

From T. G. L., Tionesta:

"What is meant by 'sistering' a frame?"

—If you break or crack a frame (rib) in a wooden boat, it is often virtually impossible to replace the fractured member. Instead, most shipwrights will "sister" the broken portion by bolting or screwing a similar piece along one or both sides of the fracture. This type of repair, if performed carefully, will be at least as strong as the original member.

From R. W. G., Lancaster:

"I am restoring a 1920-vintage gasoline launch, and the strut bearing seems to be made of some kind of wood. What can I use as a replacement?"

—Many early pleasure boats used lignum vitae wood for strut bearings, and this material is still employed in this manner on large commercial vessels. Any East Coast ship chandler should be able to supply a block of the wood, and you can have a local woodworking shop turn out a bearing insert. A longer-lasting if less authentic solution would be to have the strut rebored to take a modern rubber insert.



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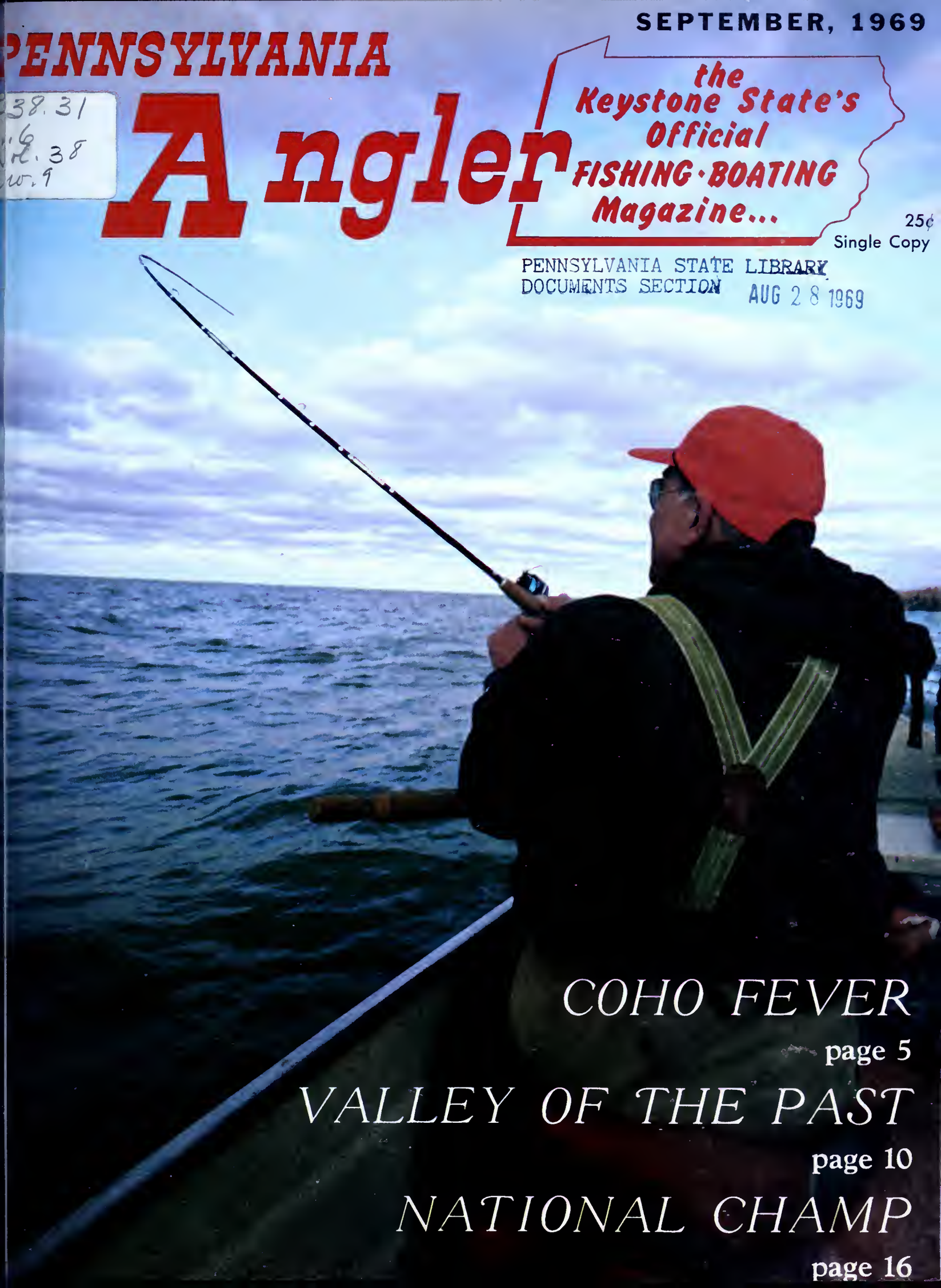
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CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



LEAVE IT BEHIND?

After Labor Day quiet and solitude, marked only by Nature's sounds shroud the lakes, ponds and streams of "Penns Woods". Summer eamps have elosed, vaeationers are back at work and only on the weekends will voiees, stereo and other sounds of man's doings echo through our remote vacation lands. The bright awnings of shoreline dwellings have been earefully stowed. Cottage windows no longer show cheerful lights at night, motor boats are silent and colorful sails have been dried, furled and safely paeked away.

Within days after the fall exodus of "summer people" Nature aets to hide the evidenee that these folks ever existed. Leaves start changing eolor and begin falling to eover the ground. Late blooming plants show their bright flowers and many weeds and grasses take on a spurt of new growth in response to eooler weather. Fall rains erase other marks of man's presence and well-worn pathways tend to fade away when relieved of the daily pounding of many feet.

Seemingly Nature has made an all-out effort to thoroughly erase any traee of man's presence, thus enabling a refreshing renewal of its beauty for next summer's visitors.

And with just a bit of help from the vacationer, pienicker, camper, fisherman, boater and others who use our waterways and the immediate surrounding shores, the fullness of Nature's restoration measures could be effeeted. Unfortunately, it seems sueh cannot be the ease. Our technology has produeed a vast array of substances that can withstand the natural proeesses of deeay and deeomposition for years—even for generations. These substances are found in such forms as glass bottles, plastic containers, aluminum beer and soda cans and metal foil dishes, paekages and wrappers. All of these items are virtually indestructible and remain for years to mar the site on whieh they were carelessly dumped.

Heavy summer vegetation often temporarily hides mueh of the litter that is thoughtlessly strewn along a hiking trail, or deposited in a pile at a eampside, pienic spot, gathering plaee on an island or boat mooring area. Heavy leaf fall usually continues Nature's hiding process a bit longer. Then winter snowfall covers the unsightly debris of the summer's outdoor visitors.

It is not until early spring when all vegetation is thoroughly flattened, when the forests are barren, when stream banks are still muddy and brown that the full impaet of the American littering habit beeomes most evident.

There are no printable words to deseribe the disgust that fills the landowner or the considerate and thoughtful outdoor enthusiast making that first trip into the outdoors in the early spring only to find a continuous trail of litter, debris and junk along his path.

Sadly this unsightly clutter was carried into the outdoors and left behind by supposedly "eivilized" and "intelligent" folks—folks whom we must assume enjoyed Nature's beauty along a stream or a lake or on an island shore, but who were too lazy and too thoughtless to carry their debris baek home for proper disposal.

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

SEPTEMBER 1969 VOL. 38 NO. 9

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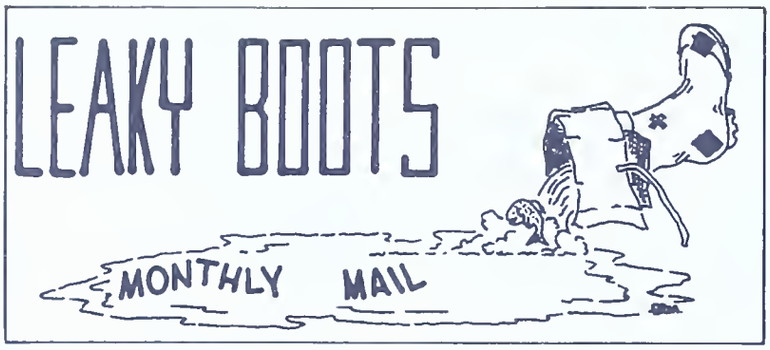
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Cover Photo/TOM EGGLER

D. THOMAS EGGLER, EDITOR

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SALUTES RESPONSE

Gentlemen:

This is a salute to Frank Ullom of McKeesport and W. S. Bentz of Harrisburg for their letters in reference to the Larry Souchak letter. This man must be the type who follows the stocking trucks and wants the streams to himself. To criticize any method of fishing is ridiculous. My wife has been fishing for 30 years, myself for 50 years. We have fly, bait casting, spin casting and spinning rods as outfits, but use mostly spin casting and spinning rods. The simple method of spin fishing has made fishing easy for more women and children than ever before. My wife and I support 4 children, ages 9 to 15, in tackle and see that they get fishing. In 1970 we will buy licenses for two of them and will continue until they finish high school.

Mr. Souchak should remember it's not the spin fishermen who do the so-called depleting of trout, but the "meat hogs" who follow the stocking trucks and call themselves "sportsmen."

Joseph J. Morgan, Allentown

STOCKING COMMENTS!

Gentlemen:

I would like to add my comments on fishing and the stocking program carried on by the Fish Commission.

For several years, I have assisted our Waterways Patrolman, Mr. Fred Ohlsen, to stock fish in our Carbon County streams at every opportunity. I have heard fishermen complain as to the size of the fish, quantity of the fish, etc.

Most of the time I don't even bother to fish when we are done stocking, but return a day or two later when the stream is "fished out." That's when I find it "fabulous." The others, I believe, have then gone to another area that is being stocked, so there is no problem of congestion.

The main problem of the stocking program, I believe, is the "sportsmen" themselves. I realize not everyone is as fortunate as I am to work on the night shift (which I have been doing by choice at a Reading newspaper for the past 12 years) so they cannot have the privilege of being able to make themselves available at stocking time.

But time and time again, I have seen the same faces, beer cans in hand, stand idly by while just a handful (the same handful) carry the fish to the stream, while they follow, still griping about the size and quantity.

I think that under today's conditions the Commission does a fine job and that it does everything it possibly can for the fishermen and Pennsylvania affords some of the finest fishing in Northeastern United States.

W. F. Miller, Lansford

LETTER ON BIG DEER

Gentlemen:

While fishing Big Deer Creek (Indianola) a few weeks ago I couldn't help notice all the litter that was laying all around me.

After cleaning up the immediate area I went to the sportsmen's club nearby to find my fellow members talking about the same thing I had in mind—LITTER!

It was mentioned that day that the Fish Commission wasn't going to stock "our stream" any more because of the litter problem.

I can promise you that we will do everything legally possible to prevent the "litterbugs" from fishing Big Deer Creek.

Give us another chance because stocking "the creek" with trout is the best thing to happen to the old home town in a long time.

My thanks to the Pennsylvania Fish Commission and to the Pennsylvania Angler for helping me to enjoy fishing even when the "big ones" get away.

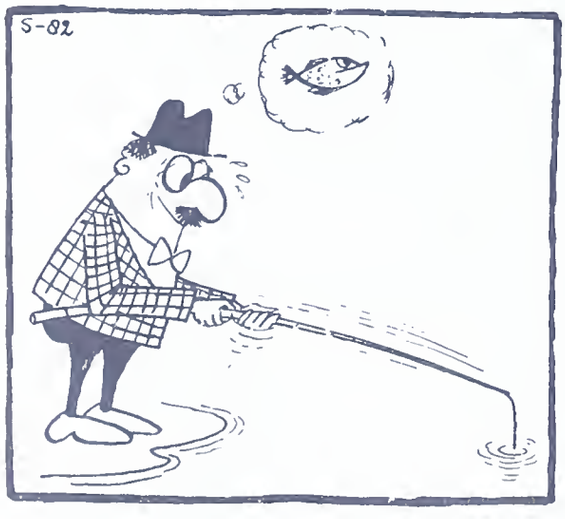
Joseph Fraser, Pittsburgh

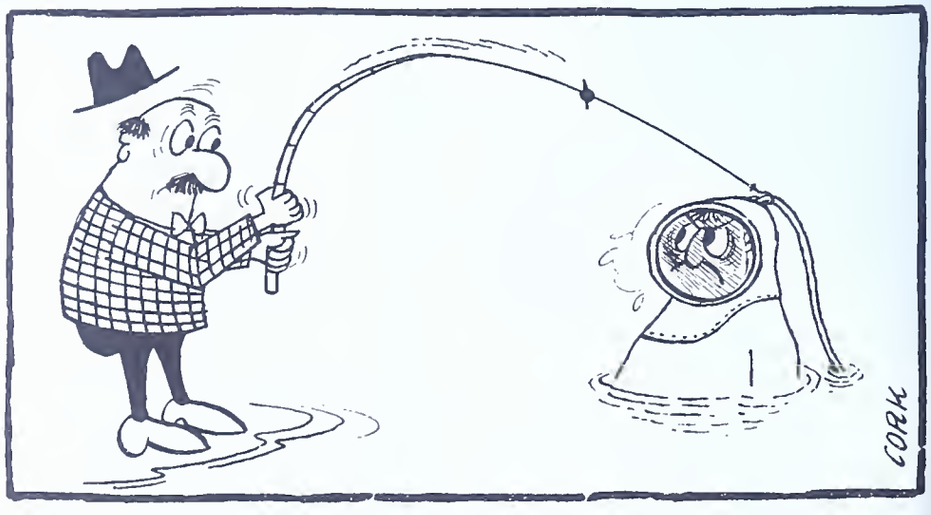
ONE DOWN—

Gentlemen:

The following statement was part of a letter to the editor that appeared in a spring issue of the Philadelphia Inquirer:

> **"No trout fisherman has any reason to complain if he lives anywhere near the city of Philadelphia or near the Fairmount Park's Wissahickon Creek because the State Fish Commission stocks**





the stream with many trout before and during the trout season."

I am sorry but I have to disagree that any fisherman has reason to complain. Although the Wissahickon was stocked last spring its sister stream, the Pennypack, was not.

Why? Well because it was found to be polluted. I am an ardent fisherman and native Philadelphian and I would not like this to happen to the Wissahickon. Since the Wissahickon is only a stone's throw from my house and because it is a fine trout stream I have fished it many times this season as well as in the past. I regret that the Pennypack has fallen prey to pollution and litter, but so too do I see the same happening to the Wissahickon unless some immediate action by the city is taken.

This year, the Fish Commission denied the Pennypack any trout due to the heavy pollution that existed there. It is certainly not the Commission's fault there was no stocking, but the blame can be placed on the city itself due to its lack of foresight and neglect.

Direct action must be taken by the city to clean up the Pennypack Creek and to take preventive measures.

If the city can spend great amounts of money and time solving its educational, housing, and racial problems, it better realize that of equal importance is its parks and streams, the only natural God given entities it has left.

Michael H. Skureck, Philadelphia

KEYRING FOUND

Dear Sirs:

While fishing at Schraeders Creek I found a keyring with eight keys and clipper. Maybe by chance the loser is a subscriber to the Angler. A notice of this published in the magazine would be appreciated.

Joseph Yokitis
110 N. Loyalsock Ave.
Montoursville, Pa. 17754

Anyone lose a keyring in that area? Contact fisherman Joseph Yokitis.

REBUTTAL TO MR. FEGELY—

Sirs:

Edwin and I have been impressed with the noticeable improvement of the Pennsylvania Angler in recent months. You have been emphasizing fly fishing, have sharpened your attacks on pollution and have run some fascinating articles of general interest. These facts, together with a great respect for my home state, have prompted me to continue to subscribe to your fine publication.

I was surprised when you published Edwin's letter in the March issue; surprised because I didn't think his snake to be close to the record for Pennsylvania. The thought of a planned rebuttal to appear in a later issue, calling attention to a feature article did not occur to me. I thought the letter was serving to remind readers that poisonous snakes thrive in parts of the state where adults and children might not expect to find them. In that regard the letter would serve as a warning to be observant and cautious, even near populated areas.

In rebuttal to Mr. Fegely's point of view (and perhaps your own) I submit that it is far less obnoxious to me to see a picture of a dead, poisonous snake than to see photos of hatchery trucks in action at water normally unsuited to trout, or to see photo after photo of dead fish to justify citations awarded for killing them, or to read of limit catches made at certain stocked or unstocked streams. Perhaps that is a distorted point of view. Perhaps it represents the first step toward maturity.

Missouri stocks waters suited to trout and maintains four state parks, strategically located throughout the state, for the meat fishermen. Those who need to prove their prowess as fishermen pay $1.25 per day for the privilege of carrying five dead trout home for a fish fry. Those who enjoy the preparations for a day on the stream, the strike, the fight *and the release* to fight again, enjoy their sport almost year-round. The meat fishermen have been "bunched," if you recall the joke, and the analogy is *quite* appropriate.

I suggest a similar policy, a policy of conservation, for Pennsylvania. Use the monies for improvement of streams rather than to perpetuate actions that led to the elimination of native trout and other wildlife throughout this country before we were here to shout for preservation.

D. W. Beistel, Ph.D.
The University of Missouri at Rolla
Rolla, Missouri 65401

KOMMER REPLIES

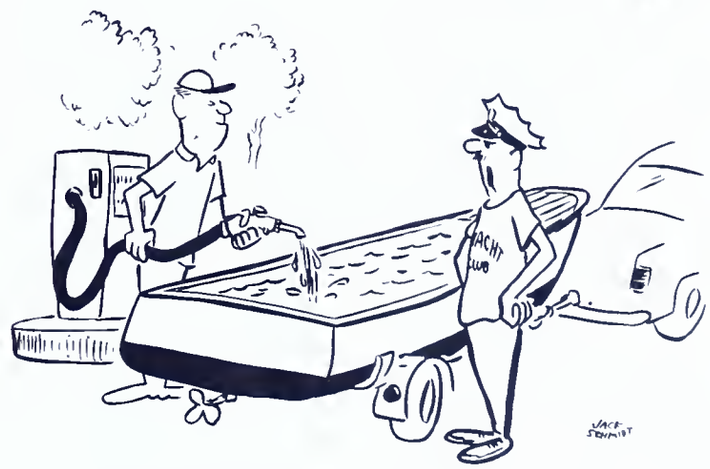
Dear Sir:

I would like to take this opportunity to reply to the letters of Messrs. Naughton, Poust, and DuBroux published in the April "Angler." I feel that these writers have unwittingly added strength to my arguments for a change in present management policy of our trout streams and lakes by being relatively uninformed as to the total situation in our state. I'll attempt to clarify this statement.

1. Pennsylvania, too, has polluted water—over 3,000 miles of mine-acid polluted streams alone. Not to mention the many streams and rivers that are partially polluted by mine acids, municipal and industrial wastes, and silt run-off from our many highways.

2. Pennsylvania stocks over 2½ million catchable trout yearly. Over ½ million licenses are also sold annually. Add to this the large number of youngsters who try their luck and you'll arrive at a figure of just over 4 trout stocked per angler.

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"THAT'S NOT WHAT I MEANT BY . . . 'AND FILL THE BOAT!' "



FISHING OUTLOOK

By-- Stan Paulakovich

FALL FISHING

IN HIS BOOK "Matching the Hatch" Ernest Schwiebert says "Fishing is a gentle Art. It can be both humbling and satisfying." We were enjoying a pleasant weekend in early May with one of our neighbors at Lake Wallenpaupack. Walking the shoreline and casting out with silver C.P. Swings the trout were co-operating beautifully. Cooperating that is with everyone but myself. Our host Willie and his two nephews Rick and David and my nephew John were having a field day but the so-called expert (me) didn't have one trout to show for his efforts. Finally in desperation late Sunday afternoon I took off the heavy oversized swivel I had been using and tied the lure directly to the leader. Soon three brown trout laid on the damp moss of the creel. Perfectly proportioned, twelve to fourteen inches in length and the flesh was a deep pink. They provided a satisfying end to a most humble beginning of a fishing trip.

September is a fine month to do some exploratory fishing. Trout are still in season in approved lakes and are a suitable challenge now to any angler. Extended season streams are also good.

A few of the top spots for trout over the state that year in and year out give up fine catches include the following: Koon and Gordon Lakes in Bedford County, Letterkenney Reservoir in Franklin County, Deep Lake in Monroe County (which is reached after a two mile walk through Game Lands # 38), Pike County has Fairview and huge Lake Wallenpaupack and in Potter County is Lyman Run Lake which always has fine fall fishing.



"YOU ALWAYS SAY WE SHOULD DO THINGS TOGETHER—YOU GET TO CLEAN THEM!"

In Wayne County lies eighty acre Upper Woods Pond, reached off of Route 371. This is an extremely remote lake, having depths well over 100 feet. It has good populations of both brown and rainbow trout in the better than ten pound class. The access area is located near Legislative Route # 63041. No rental boats are available here so bring your own. Motors are not permited on the lake and the use or possession of bait fish is prohibited. Upper Woods Pond also contains Coho and Kokanee Salmon.

Coho's and Kokanee in this lake did not reach the growth expected of them but they will average ten to twelve inches. Their flesh is a deep pink to orange color and they are among the best eating fish ever taken on a hook and line. The fishing method used for these fish is unique. First be sure you have at least 125 feet of anchor line. Drop anchor off shore about 100 feet. Open a can of whole corn (either white or yellow) and with a spoon broadcast several spoonfuls around the boat. This will attract schools of bait fish. Using a spinning outfit with light line, bait your size twelve or fourteen hook with small garden worms. Lower this to the bottom then raise up a foot or so. If, after a ten minute wait you haven't had a bite, raise your bait up about ten feet. Repeat this till you find the zone the fish are feeding in. The strike of these fish is light and quick—just a fast tap-tap. Set the hook gently on the strikes as their mouths are soft.

September is also a good month to explore those small lakes, ponds, back channels, canals and mine holes in search of my favorite—the largemouth bass. Some of these waters contain six pounders that have grown fat and sassy without having to worry about the king of the predators—man. Larger impoundments where week day boating is slack are good bets for early morning and late evening bugging and plugging. Around the shoreline, at weed beds, lily pads and stumps Old Linesides is waiting.

Largemouth are readily taken on artificial lures, both surface and underwater. While the setting of the hooks after the strike is almost automatic, the fight that comes after is far from routine. Pennsylvania's record largemouth is a 29 inch, eight pound eight ounce monster that was taken way back in 1936 from a place called Stillwater Lake which is no longer listed in our Fisherman's Guide. Being predominantly a lake or pond fish the largemouth is found in just about every county in the state. Of all the state records now held for all species, this is the one that I feel is just about over due to be broken.



SHYRL HOOD, head of the Pennsylvania Fish Commission's warmwater fisheries program, holds one of the coho that returned to Pennsylvania waters last fall. Several thousand returned during the fall months of 1968, but the big run—and the big fish—are expected this fall.

GUESSING WHAT NATURE WILL DO CAN BE PRETTY RISKY, BUT IF ALL THOSE COHO SALMON IN LAKE ERIE FOLLOW NATURE'S URGE THEY'LL BE HEADING BACK TO PENNSYLVANIA SHORES SOMETIME SOON. ALREADY THEY'RE CREATING AN ILLNESS AMONG FISHERMEN KNOWN AS . . .

COHO FEVER

BY JIM YODER

The mysterious malady which has stricken so many thousands of anglers throughout the Commonwealth over the past twelve months is unmistakably "COHO FEVER!"

It all began with the planting of coho fingerlings in Lake Erie's tributaries back in the spring of '68. This initial exposure, however, was not acutely infectious. The return of precocious three to four pound males early last fall though—now this was something else again! The salmon were responding and following a natural pattern, just as they were expected to do. "It's working," fishermen shrieked! Who could doubt any longer that Coho Salmon would succeed in Lake Erie? This exposure was too much! What followed was a complete breakdown; incoherent mumbling—five thumbed fumbling through the tackle box. These were the earliest symptoms. The glassy-eyed, far-away look came later—and was more lasting. Desperately we tried to treat the ailment with a Coho Salmon slide program, tracing Pennsylvania's Coho program back to its infancy, but alas—we made things worse! This spread the infection across the state to areas where little was known about the Coho. Any angler worth his monofilament

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COHO fishermen waded Lake Erie's surf to fish for the scrappy coho during 1968. Lake Erie's unpredictable weather can create obstacles for both shore and boat fishermen.

ERIE'S MARINAS will probably be busy places if the coho return in the sizes and numbers expected. A number of party boats are reported ready for the action.



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COHO FEVER

was thoroughly smitten; some fought back, though reluctantly and with little enthusiasm. Others realized the futility of a struggle and gave up readily. Evidence of capitulation took on many forms. For some, it was a dramatic announcement after a silent dinner, "OUR BOAT'S NOT BIG ENOUGH! IT'S JUST NOT BIG ENOUGH!" "Not big enough for what, dear?" queries wife, a veteran of countless fishing sorties on the Juniata and Susquehanna Rivers—the fourteen foot cartop had always impressed her as quite ample. "For COHO SALMON, that's what for! Where have you been woman?"

This less than tactful outburst, however upsetting, was a good sign—our ailing angler was on the road to recovery. Therapy began that very evening with a trip to the tackle shop—get the small gear first. Coho weight rod and reel, a few dozen lures—after all, what devoted wife would blow the whistle on a new boat with all that shiny new tackle on hand? Paying for the boat? No sweat. The color TV, sewing machine and vacuum cleaner ought to bring at least seven hundred—a substantial down payment and the 99 easy monthly payments present even less of a problem. Cutting out the bi-weekly trips to the beauty shop will take care of half the installment alone. The kids are altogether too plump in his sound judgment, so a 50% slice in milk deliveries will institute a desirable trend in the family's health program and add another eight or ten bucks to the kitty. Having never met a selfish angler, it seems safe to assume that his personal sacrificial contribution will be wiping out the afternoon coffee break! Drastic? *Yes*—but there are times when every angler must rise above his personal pleasures and sacrifice for the cause!

With Lake Michigan's fantastic coho fishing still fresh in mind, many view the return of the coho with mixed emotions. The nimrod has anxiously awaited what has just got to be his Day in the Sun—it may very well turn out that way; the skeptic still doubts that the introduction of Coho Salmon in Lake Erie will "work." Some lakeshore residents are understandably less than enthusiastic about the invasion of anglers—if the pattern follows Lake Michigan's; yet Erie's hostelries, boat liveries, marinas, tackle shops—not to mention gasoline pumps are looking forward to a great off-season bonanza—everyone and everything may smell like fish, but on the way to the bank—WHO CARES? Boaters are tickled with the prospect of an extended sportfishing season; while the cautious can think only of the tragic loss of life on Lake Michigan on the fateful September 23rd in 1967. Let's examine and evaluate each of these avenues of thought.



WEST COAST fishermen have been catching good size coho for years both from party boats while fishing offshore and from streams inland. Coho shown above were considered "small" by the fishermen who took them during the middle of July last year near Ilwaco, Washington.



LAKE ERIE'S SHORELINE (above) provides few spots for launching so the few public and private marinas will probably be busy. Fishermen using boats on the big lake should make sure they are properly equipped (don't forget those life saving devices) for rough water, as even small swells can create problems.

Our nimrod's outlook can't be debated—a coho salmon can very well be an angler's largest catch—a 3½ pound jack will fill that bill for a great number of anglers. His vision of a 15 to 20 pounder is not unrealistic either, but he's got to face up to the fact that even Coho fishermen can get skunked! The skeptic has a point—who really knows what can be expected of any new introduction? My only comment here is, "Nothing ventured—nothing gained!" The return of the early maturing males last fall led many to prophesy, "They'll be back, the big ones *always* follow a year later." But in the dictionary of the fishery biologist, the words *always* and *never* have been deleted.

We're all sympathetic with the plight of the shore resident, but hopefully the Commission's as well as local efforts to provide further access to the lake willl alleviate much of this problem. For those who cater to the tourist trade, who can deny them the hope of an extended season?

Boaters, let's call them "natives" or "resident" boaters, never did need an excuse for extending the boating season on Erie—the weather has always been the determining factor—a factor which *they* respect. It's the boater unfamiliar with big water operation, specifically Lake Erie boating, who may become the real problem on the scene. A look at some of the facts and figures revealed in the in-



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COHO FEVER

vestigations after the 1967 Lake Michigan tragedy will bear this out.

In August of '67, the Michigan Department of Conservation warned boaters by press and radio media of the dangers of fishing in boats less than 16 or 18 feet in length on the exposed waters of Lake Michigan. This may have been prompted by the observation of various types of unsuitable craft observed 6 to 8 miles offshore—inflatable rafts, canoes, kayaks, prams, 10 to 12 foot outboards powered with 100 horsepower motors, and amphicars (amphibious motor vehicles of low freeboard and stability). It would seem to me that anyone who would venture this far out on one of the Great Lakes so underboated is just about three bricks short of a load, yet it was done and in all probability will be done again. It was fortunate that no drownings occurred—despite numerous capsizings. Probably their luck had some influence on the fishermen who were to follow. Many were warned of the weather and advised to return to shore but refused to heed the advice. The boater accustomed to the relatively protected inland lakes and rivers can't appreciate the violence of these larger waters. Most of the capsizings and drownings occurred in Michigan when boaters tried to beach their boats in surf estimated at 8 to 10 feet. This feat is difficult—all but impossible for anyone other than an experienced boater. It is felt that many of the boats that capsized might possibly have weathered the blow had they remained offshore until the waves subsided.

"The (National Transportation) Safety Board considers that one of the principle causes of loss of life was the failure of the victims to wear available lifesaving devices. It is noted that, in the face of breaking seas and heavy surfs, none of the boaters who got in difficulty near the beach was observed to use lifesaving devices. . . . Buoyant vests and life preservers are bulky and uncomfortable to wear over heavy clothing, but it is illogical to conclude that boaters would not use them if the danger of capsizing was recognized. Also while buoyant cushions are not as effective as buoyant vests or life preservers, particularly in heavy surf, their use might have saved a few lives. The Safety Board recognizes the ease of stowage, compactness, economy, and popular acceptance of buoyant cushions in comparison with life preservers and vests. HOWEVER, THESE FEATURES STILL DID NOT RESULT IN THEIR USE BY THOSE WHO DROWNED!"

It is a great wonder that this almost total disregard for personal safety did not result in more drownings in the 49 degree water. Some perished who might have survived in warmer water.

Lake Erie is not to be toyed with—commercial fishermen, men who have spent the greatest part of their lives on her wouldn't be found dead (literally ! !) in some of the situations inexperienced boaters place themselves. Nothing should be left to chance. DON'T VENTURE OUT ON LAKE ERIE UNLESS YOU'RE PREPARED FOR IT! Learn to LOOK FOR and HEED Small Craft Warnings. Call ahead—get the weather forecast. Hoping for good weather to prevail is nonsense—be prepared.

Pennsylvania's Coho fishing will not be without its problems. Not until the final lure has been retrieved will we have a good box score. In my memory the introduction of no other fish has generated so much enthusiasm—brought about so many problems. The season is upon us—has it been worth it at all? We'll soon know.

MORE COHO are being reared for stocking in Erie's Pennsylvania tributaries next spring. Here a PFC employee feeds some of the active fish held in raceways along these small streams.



ROW, ROW, ROW --YOUR BOAT

by Calvin A. DeViney

Being naturally lazy, I own and use an outboard on most fishing outings. It can't be beat for trolling or for getting back and forth in a hurry to that old fishing hole some distance away across the lake, or upstream in a river where the current would soon tire you if you tried to paddle your way. Once I get there though, the outboard stops.

There's a lot to be said for the peace and quiet of rowing gently around a little cove that's full of lily-pads. An easy stroke or two of the oars and a new casting area opens up in the weeds where the big ones wait. Only the distant cawing of a crow or a frog croaking can be heard though sometimes a marsh-bird or a few ducks will suddenly wing their way to safety if you approach too closely. The noise of the outboard, reminding you of the hustle-bustle city life, is forgotten. Now there's time and quiet enough to have a pleasant chat with your fishing companion, or to light a pipe and meditate on this foolish world.

Recently, a swapping deal netted me a twelve foot aluminum boat. It was just what I'd been looking for as it would fit on top of my station wagon. Now I was portable enough to get into the little lakes and out-of-the-way places that looked so "fishy." The one and a half outboard I had was plenty of power for my type traveling, but no oars came with the boat.

It had been years since I'd bought a pair of oars from a store but it was either that or no rowing as my others were much too long and heavy for this boat. Lo and behold, after shopping at half a dozen or so stores, no oars were to be had with the oar-locks pinned to the wooden handles. I can hear the howls of protest from maybe half of you already, "Who wants pinned oars?" Well, I do for one, and so do about the other half of the readers of this too.

Oars floating free on chafing bands in oar-locks are fine for some people, but I've mashed my thumbs a couple of times when pulling on the oars and they slid together. I like a pinned oar that leaves a one to two inch gap between the handle ends when they are nearly together on the back stroke.

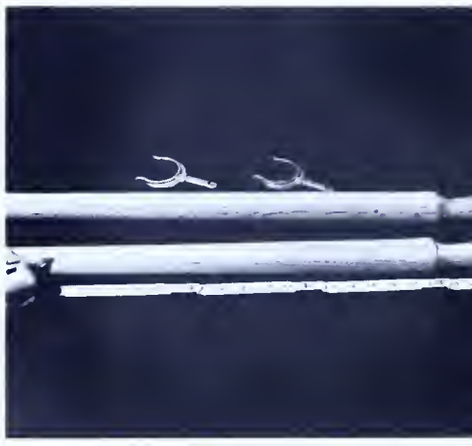
Loose oars may give more speed and power when you can feather or turn the blade up parallel to the water at the end of the stroke and that it requires less energy to row with them. But, if I want more speed and power as well as distance, I'll crank up the outboard to get it.

My object in rowing is for small distances that only require a few strokes, not to burn up energy or distance. After that couple of strokes, my oars are shipped gently out of the water and quietly set down on the boat's gunnels for use after fishing this new area thoroughly.

How many times have you had to chase an oar floating away from the boat? When pinned it just doesn't happen—not even if I leave them in the water for a few casts.

My problem of pinned oar-locks is now solved as the photos show. The new (to me) boat is working out fine in those little hidden lakes and waterways I've been wanting to explore for some time. The fishing is great and there's no outboards to disturb the wilderness silence.

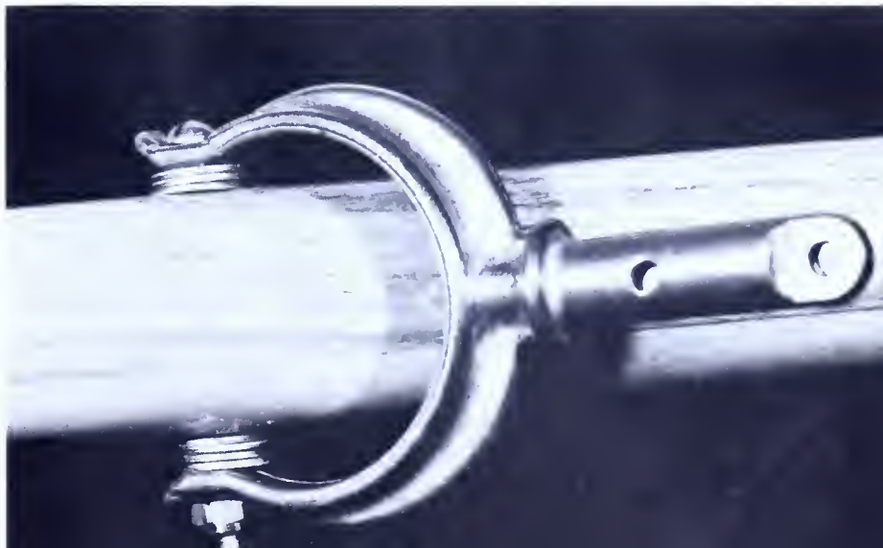




STEPS TO CONVERT pinless locks and oars are shown here. First drill a 3/16 hole in each oarlock to finish a hole on each side (above left), then after each hole is drilled separately, drill should be run through both ends of the oarlock together to ream the holes out for alignment (below left). Next select the oars. They should be twice the width of the beam or center of your boat. Mark each for drilling (above right) so there will be a two inch clearance when brought together. When marked then drill each oar blade (below right). Make sure blade is flat, as shown. Hole should be an exact 90 degree angle from the flat blade. Finished oarlock pinned to the oar is shown at bottom of page.







Valley of the Past

by DON NEAL

THE STREAM, A SMALL RIVER, RACES SWIFTLY down its steep riffles to languish idly in one or the other of its deep and placid pools. Coursing as it does through a veritable canyon of unbroken greenery, its crystal waters swirling around sunken logs or imbedded boulders, it is a stream that would gladden the heart of any angler.

Yet to me, the stream and the valley that hosts it, holds an attraction completely unrelated to angling—the daintily floating fly, the strike, the sharply bent rod, or even the thrashing fish at the end of a line—on those occasions when I have the time to visit and enjoy this fabulous area.

What interest could supersede the desire to fish such an ideal stream in such an impressive setting? The answer —it may seem ridiculous to you but very meaningful to me—are the events that took place a hundred or more years ago as this valley teemed with fanatical masses of humanity and the stream provided a series of adventurous episodes that rank among the most exciting and dangerous ever performed by man. Just to walk this haloed ground and view the sites where such fantastic events took place inspires and thrills me.

For in this beautiful valley—now so woodsy, so peaceful, so serene—boiled up an inferno of human activity that defies even the most vivid imagination. Thousands of men cursed and cheered each other as they scrambled in a frenzy of greed to claim their share of the black and odorous liquid gold that flowed up from the rock-studded ground at almost every point where a hole was punched down. For this was the Oil Creek Valley of the 1860's—the Klondike, the El Dorado, the Virginia City of its day.

While standing at any one point in this fabulous valley, the events of the past can become very real. Ox teams dragging huge timbers from forest to form the derricks. Carpenters pounding nails and sawing rough boards fresh from the sawmill as they hurry to construct one of the 17 boxboard boom towns that will eventually thrive in the valley. By the wagon trail that was worn rather than laid along the bank near the creek, a land speculator straddled a low stump and offers to those who pass by a lease on a quarter-acre of oil land at a price that would have bought the entire valley before the boom.

From around a turn in the trail a heavily loaded cargo wagon might come into sight, its arrival not unheralded. Long before it came into view the cursing "skinner" could be heard as he urged his 4-mule team along the deep-rutted course. Mounted riders, oil buyers on their way to dicker with the newly-rich well owners or barrel and equipment salesmen making their way to the valley's latest strike, crowded from the trail by the oncoming wagon cursed the driver as he passed, then returned to the trail.

And this was just the beginning of the valley's volcanic existence! Before the next twenty years came and went the unnumbered thousands who flooded to it from all parts of the world had made (or lost) more millions of dollars than had ever been heard of before. The great gold and silver rushes were but a shadow of what happened here where new wells were being struck daily and uncounted thousands exchange hands daily in land transactions.

It all started when Col. Edwin Drake brought in the first commercial oil well on the banks of Oil Creek in 1859. What had been known to the local residents as "Drake's folly" as he drilled his hole, suddenly became something else when he started pumping 10 barrels of oil a day with the market price at $40 per barrel.

Titusville businessmen lost no time in getting into the oil business. Within a week of Drake's strike almost every square foot of the Oil Creek Valley had been leased by the scrambling investors and land speculators. Before the "land grab" mania reached its peak some years later farms that had been offered for little more than their annual taxes before the boom were bought for as much as a million dollars, then brought their buyers as much as six million dollars in profits.

It was in 1862 that developments in the Oil Creek valley really whipped the oil frenzy to a white-hot heat. Bigger and better wells were getting to be a regular event by then, and transportation of the oil from the wells to market was getting to be a major and profitable business. Mile-long wagon trains plied the rutted roads that led to the railheads at Garland, Corry and Union Mills, and barrel-loaded barges ran the length of Oil Creek to the Allegheny River where their cargoes could be loaded on river boats headed for Pittsburgh.

The wagon transportation hit its all-time high by 1863 when the 3,000 barrel per day flood of oil from the Noble



HIGHWAY SIGN stands near what was once the corner of Petroleum Center's main streets, at the location of one of the richest financial institutions of the time, the Bissel Bank.



WORLD'S OLDEST operating oil well is the McClintock #1 near Rouseville, owned by the Quacker State Oil Refining Corporation. It was from this well, and others nearby, that the fabulous fortune flowed daily.

well required the services of between five and seven hundred wagons on an almost around-the-clock basis to move the oil to the railhead at Garland, twenty-five miles away. This demand for teams and wagons was not surpassed until two years later, 1865, when over 1,500 were required to haul the oil from the booming Pithole field to Miller Farm, a railhead newly established in the Oil Creek valley.

Prior to the railroad inching its way into the valley, much of the oil produced there depended on barge transportation to make its way to market. At first the running of barges down the creek could only be done during periods of high water known to the oil men as "freshets." Because the production of the valley wells was so tremendous, the infrequency of the freshets created a problem for the well owners. Their needs called for the freshets to be timed to their convenience.

They found an answer to the problem by working out arrangements with local lumbermen, who had constructed huge dams on the headwaters of the creek, to release the impounded waters of these dams at predetermined times. As a part of the arrangement the oil men paid a per barrel fee through an association, with a retired preacher riding horseback up and down the valley to collect the fees before each release was made.

The releases came to be known as "pond freshets." And as the time for a freshet approached the oil men would load their barge or barges with the barreled oil. Then as the deadline approached the pilot and his crew would take their places on the barge.

With the pilot manning the oar and a member of the crew standing ready with an axe to cut the tie-in rope the rush of the oncoming freshet was excitedly anticipated. If it was a good freshet it would come down on the barge crew as a high wall of vicious flood water that would strike the craft an almost shattering blow. This was the crucial moment. If the pilot signaled for the tie-rope to be cut too soon, the barge would be rolled under by the rushing waters. If not cut soon enough after the head of the flood passed, other barges riding just behind the flood's crest would crash them to bits.

The act of launching an oil-loaded barge on a pond freshet was an art and the better pilots were sought and well paid. Once away, and without further mishap, the barge would ride the length to Oil City where the cargo would be sold.

But it was an unusual freshet that went off without mishaps of one kind or another, some of them serious. When a mishandled barge hit a rock or a bridge pier barges could pile up in a tangle of terrible destruction and thousands of barrels of oil might be lost to the swiftly running flood. The worst of these catastrophes occurred May 31, 1864, when hundreds of barges piled up at the Center Street bridge in Oil City.

In 1865 the valley was booming as no other place on earth had ever boomed before. The Oil Creek railroad which had penetrated as far as the Miller Farm two years before was now pushing on to the Schaffer Farm. The Miller Farm siding was handling 9,000 barrels of oil per day, mostly from the Pithole fields, and in the shadow of its 17 huge storage tanks four sizeable hotels were prospering.

Just across the creek, Meredith, a satellite boom town consisting mostly of 11 hotels and a conglomeration of oil company and land offices had sprung up and thrived. Yet the fluctuation of the valley's population, both here at the

continued on next page

Valley of the Past



ABANDONED HOUSE marks the location of the once famous boom town of Funkville. It was the "strike" of the famous Fountain Well in 1861 that brought this town into being where the thousands of gallons of oil gushing up from the ground saturated the world oil market and a veritable "river" of oil was poured into the creek for lack of buyers and facilities.

continued from previous page—

valley's upper end and all the way down to Oil City, was of such magnitude that George Ford built a barge-mounted hotel, boasting twenty elaborately furnished staterooms, and floated it up and down the creek as he followed the boom-tide created by new strikes.

Downstream from Miller Farm things hadn't been standing still. The famous Fountain well at Funkville had come in at 3,000 barrel a day in 1861, and the Sherman well, where the owner had to sell his shotgun to get enough money to finish drilling, had come in at 2,000 barrel a day in 1862. Petroleum Center, destined to be the queen of the boom towns in the valley, had come into being in 1863 and by this time the Hyde & Egbert property had made history with such famous strikes as the Maple Shade, Little Croquette, and Jersey wells.

Just below Petroleum Center were the Columbia Farms where Andrew Carnegie, as a shareholder, had invested the savings from his meager salary as a steel mill laborer and made enough money to buy a steel mill of his own. And downstream from Columbia Farms were the Blood, Rynd, and Coal Oil Johnny Steele farms, all of which put millions of greenbacks in the pockets of their owners.

It was following the collapse of the Pithole fields in 1866 that Petroleum Center really came into its own as the ripsnortin' "Hell Hole of Oildom" as the Titusville Herald called it in an account that informed its readers that "—there are a horde of cutthroats and thieves, together with a gang of gamblers from the groggeries and bangnios, who prey upon society. Keno is in its glory, and sweatboards, dice and cards are well patronized. During the past ten days not less than four highway robberies have been committed and in one case the victim was dangerously beaten." Surely it was enough of a warning to let the residents of Titusville know what to expect if they visited the sinful city.

There can be little doubt that the great Benninghoff robbery, the biggest haul ever made in the early oil country, was planned in a Petroleum Center dive. Two hundred sixty thousand dollars in cash and thirty thousand in bonds were taken from the safe of an oil farm owner at gunpoint within a mile of the iniquitous borough.

With all of its toughness, the town of Petroleum Center was hard put to control the antics of the boisterous and uninhibited oil workers who came to town to celebrate the drilling-in of a successful well. There are several recorded incidents when they actually took portions of the town apart when cheated in a gambling den or insulted in a brothel and most shooting and knifing sprees were traceable to them.

So it is not surprising that Petroleum Center came to be blamed as the place where the riots against the pipelines were organized. It was a gathering place for the hundreds of wagonmen who were being put out of work by the pipelines that carried oil from the Pithole and valley fields at cheaper rates, and resentment ran high. On occasion the wagonmen had ripped up sections of the pipelines and fought spirited battles with the pipeline guards in what came to be known as the war of "axe handles and wagon-spokes." Then, one dark night, the wagonmen numbering between 75 and 100 stormed the loading dock at Schaffer Farm, shot one of the guards, and burned the huge oil storage tanks at the rail siding.

Today, Petroleum Center's few widely scattered homes are the last that remain of any of the 17 boom towns that once thrived in the valley. No one knows, or ever will know, what the total population of these towns may have been, but educated guesses estimate that at the height of the boom it could have been well over one hundred thousand. It is a known fact, however, that this fabulous valley did, in the course of only a few years, produce over a hundred million dollars of quick wealth for those on whom fortune smiled.



THE UNPRETENTIOUS BUILDING ON THE RIGHT MIGHT NOT APPEAR TO BE THE CENTER OF MUCH EXCITEMENT, BUT IT HAS REASON TO BE. IT'S THE . . .

BIRTHPLACE OF THE COHO

by **KEEN BUSS,**
Fisheries Division Chief

When the Pennsylvania Fish Commission decided in the fall of 1966 to stock Lake Erie with coho, it meant that some immediate action was needed. Because of the fear of bringing in a new disease, pathologists did not think it was wise to put the coho eggs in an established trout hatchery so it was decided to temporarily utilize a rather small spring on the Foster property which is a part of the Corry hatchery. Roy Sorenson, superintendent, and his men were asked to construct a coho hatchery and have it ready for 100,000 coho eggs within two weeks! It seemed like an impossible task but they went to work, cut an abandoned chicken coop in half and moved it over on the Foster property. In the meantime a mechanic converted 55 gallon steel drums into fish rearing units. Sixteen drums were soon completed and installed in the building. With 8 gallons per minute of water flow per drum the eggs were incubated and the resultant fry were reared to 2 inch fingerlings. In 1967 and again in the fall of 1968 the eggs were incubated and the fingerlings were maintained. In the latter year, 500,000 eggs were incubated and 300,000 fry and fingerlings held in these 16 drums. Each drum reared 35 pounds of coho fingerlings!

These Lake Erie coho may not have had an auspicious start, but then neither did Lincoln. Soon the final results of this first work with the coho should be paying off—possibly with some catches of trophy fish in Lake Erie.





FIFTY-FIVE GALLON drums (shown above) have been used to hold 300,000 coho fingerlings under the supervision of Pennsylvania Fish Commission hatchery superintendent Roy Sorenson (above, right). Once large enough the healthy cohos are taken from the drums (right) for release in rearing ponds on the Lake Erie watershed. Cohos being held in the drums are shown below.





The Dogfish

by
Glenn H. Swanson

Amia calva. A boney, unpalatable cuss in a suit of armor. Of the family *Holostei,* he has a penchant for catching panfish anglers unaware. He smashes their tackle, leaving them visions of trophy muskies. Some call him a bowfin. Others a mudfish, grindle, or dogfish. I call him a gamefish.

I can't recall when I caught my first one—but I'll never forget the last. My wife Wanda, our youngest son Mike and I were leisurely catching panfish on a sparkling summer afternoon. Using the fly rod, I dropped a Polarbear Muddler near a thick bed of pickerel weed. Something nudged the Muddler. Expecting another crappie, I gently twitched my wrist to set the hook. A churning boil the size of a bushel basket caught me completely by surprise!

"Wow," Mike shouted.

"Show-off," Wanda teased.

I just grunted, intent on leading an obviously heavy fish away from that aquatic jungle. I didn't know what I'd hooked—a bass would've been topside already.

Five minutes went by. Ten. Fourteen minutes after the strike I boated nine pounds of prehistoric muscle. On my hand scales hung the largest *male* dogfish I'd ever seen, its faint orange and green tinted sides and black tail spot with encircling yellow-orange ring proclaiming "Male" as surely as visible genitals. Smiling, I said softly "A northern should fight so well."

Dogfish, along with gar pikes, are one of the oldest surviving forms of fish life. Their skeleton is boney, as are ninety percent of all fishes presently living, but their ganoid scales—composed of a hard layer of shining enamel—distinguishes them from modern relatives. They are thick, elongated cylinders possessing primeval evolutionary characteristics. The adaptation of aquatic to land life has long been established among amphibians—yet dogfish make use of a lunglike air bladder. Schools of small fry regularly rise to the surface to gulp free air. Active adults can be located by the bubbles they release while feeding, spawning, or taking in air at the surface. Access to free air is vital to their survival during warm, sluggish weather but they regularly winter in ice-locked lakes with apparently no harmful effects. Removed from water, they live for hours encased in only a damp sack. This is possible due to the air bladder functioning as it does, as well as the very generalized, coarse makeup of the fish itself.

Dogfish have rounded heads with a large, tooth-lined mouth. All fins are soft-rayed. They contain no spines, as for instance, do the fins of a sunfish.

Males generally are a dirty bronze color. Prior to spawning, however, his sides become laced with greenish-orange splotches resembling shadows from plants. As mentioned earlier, positive identification is found near the tail. Only males have a black spot with the yellowish circle around it.

Females tend to be darker hued, duller, and as with most fish, considerably larger than males. Males average about eighteen inches long, while females run closer to twenty-four. Males apparently outnumber females by a considerable margin. Mostly males are caught. But, this may also be due to the aggressive nature of the male, and the fact that he, rather than his mate, builds and guards the nest, and shepherds the fry once they hatch.

Dogfish are nest builders. On the snout of the male are two nodules which aid him. He selects a thickly weeded spot in shallow water, preferably with a dark, soft bottom. Using fins and tail, he scoops a hole a foot deep and two or more feet across. The vegetation floats above, and provides walls for the bed. Roots line the bottom. Shadows and the blotched spawning color camouflage the male, making him nearly invisible—to all but females, of course.

To collect the two to five thousand eggs layered in the nest, the male courts the female by circling her, then actually taking her snout in his mouth. Should another male approach, he is driven off. It is at this time that most dogfish are caught, for the male is quick to attack any intruder near the nest.

For eight to ten days he keeps his vigil. Suspended above the nest, his fins circulate water over and around the eggs to keep fungus spores away, and prevent dirt and silt from smothering them.

When hatched, the tiny fry have adhesive organs on their noses which they use to attach themselves in circular swarms to the roots in the nest bottom. Fins appear after nine days, while snout organs and yolk sacs diminish. Feeding now on small crustaceans and insect larvae, the

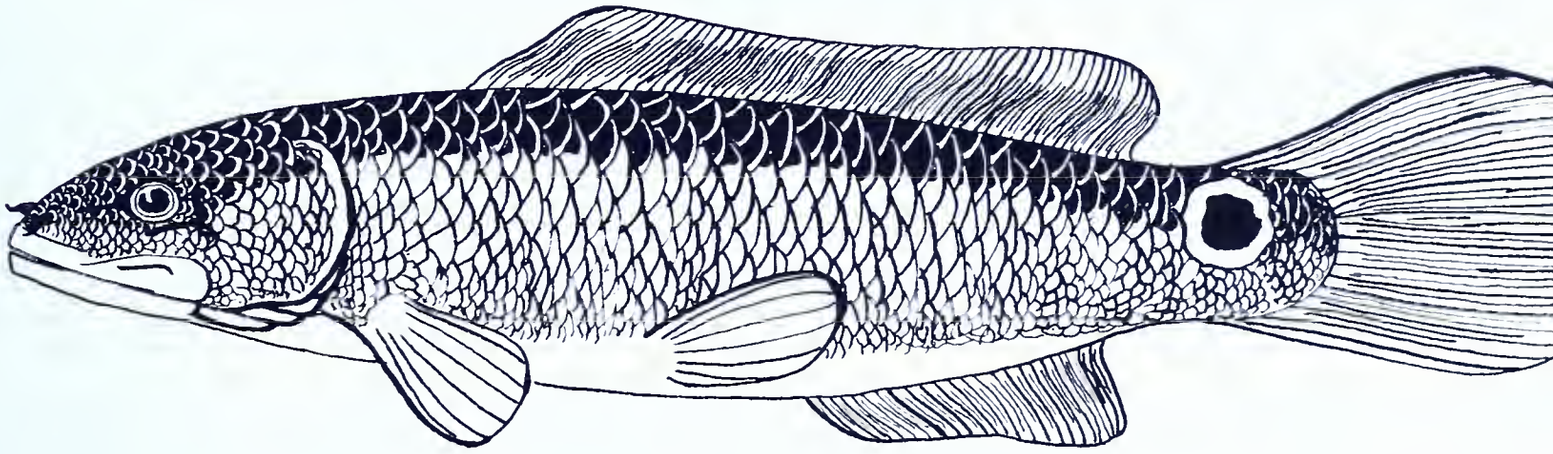
fry detach from the roots and swarm in circles over the nest. Experiments have shown that when the fry leave the security of the spawning bed to follow the male, they track him by scent. Guarded by the male, the swarms of fry remain together several weeks, dining on ever larger prey. Should danger threaten, the male splashes his tail on the surface in warning. When the fry are approximately six weeks old, the male deserts them for his old haunts in the cool, deeper water.

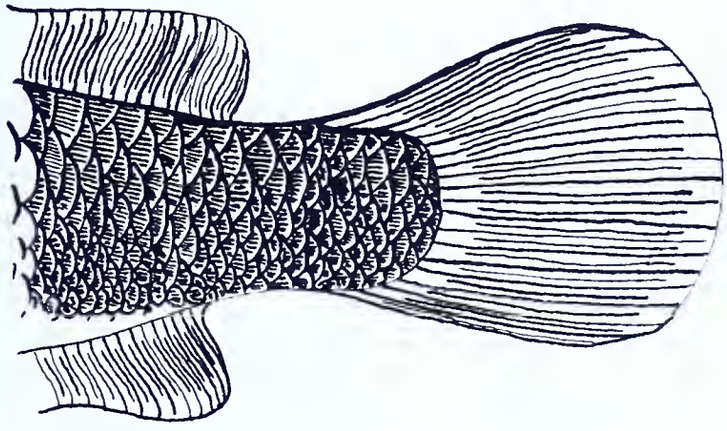
Largely nocturnal—they even spawn at night—dogfish are rarely spotted in shallow water, preferring to loaf their days in the depths. Only during spawning are they caught or observed in numbers.

Hardly a selective diner, dogfish eagerly snap up crawfish, insects, minnows, small panfish and gamefish. Worms and nitecrawlers are special treats, providing you're out to catch them as I am. My favorite lure? A light colored streamer fly such as the Polarbear Muddler, Mickey Finn, or a white bucktail (all behind a silver spinner) have been most effective for me.

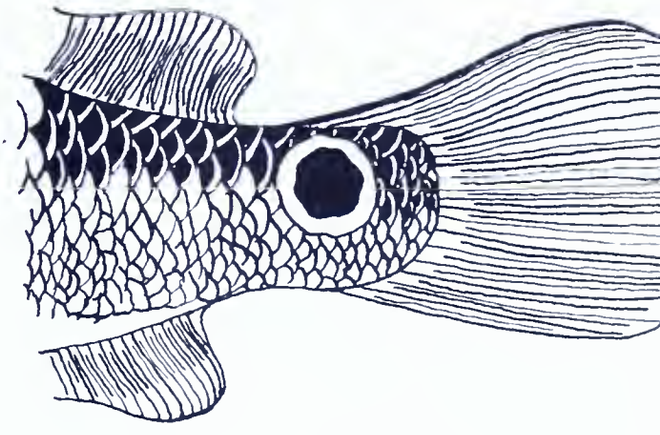
Definitely undesirable as a food fish, most anglers consider dogfish a nuisance, an unwanted cast-off to be cut up, cussed out, and classed with snags, weeds and bullheads as trash. Many anglers savor bullheads though, and without weeds and snags we'd have fewer fish. Without dogfish, we'd have less sport. An important predator in the chain of marine life, this throwback can provide you with an exciting battle. As one of my fishing buddies puts it, "Tie a dogfish tail-to-tail with a northern and he'd jerk the northern inside out." I believe it.

If you spot a string of bubbles in the muddy shallows next summer, don't dismiss it as a passing turtle. Drop your lure or bait nearby. Chances are you too may end up with an interesting and unusual trophy for your wall—the dogfish.





FEMALE



MALE





MAGGIE JORDEN displays medal she won in 1968 as a national champion waterskier as well as another won in 1964. In center photo she prepares for a toe turn as she skims along on Conneaut Lake.

SHE'S A HIGH SCHOOL SENIOR, SHE'S A PENNSYLVANIAN, SHE'S A FIRST RATE WATERSKIER. SHE'S . . .

Maggie Jorden

--NATIONAL CHAMP

WHILE PENNSYLVANIA MAY LACK some of the boating waters found in coastal states, it isn't lacking for boaters and those who enjoy watersports—in fact the Keystone State is home base for one of the country's leading watersport participants. Her name is Maggie Jorden, she comes from Pittsburgh, practices on Conneaut Lake in Crawford County, and wins waterskiing events across the country.

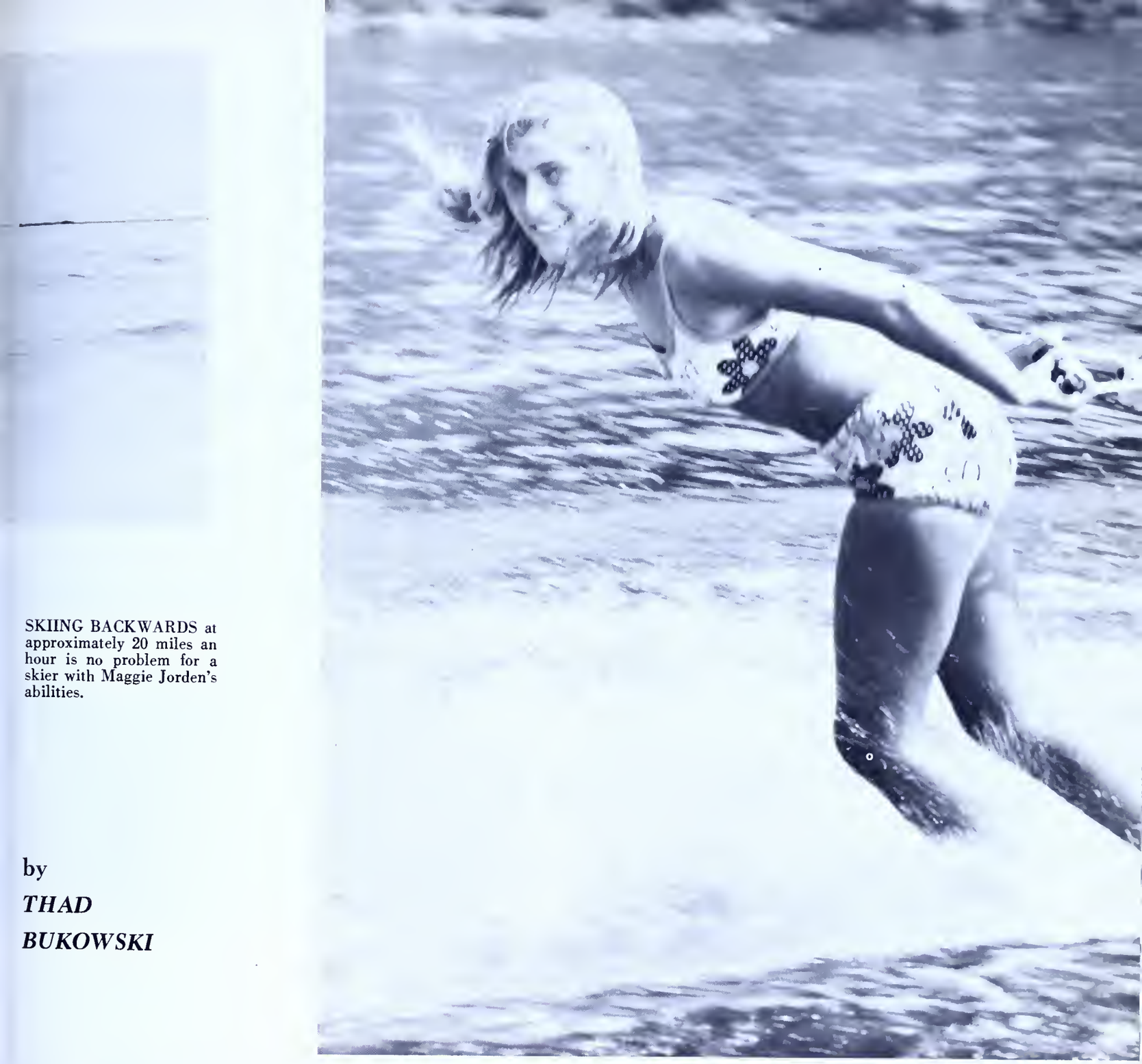
Last year she was national champion for her slalom and trick skiing, in addition to also being at the head of competition in the Eastern Region (Maine to Virginia).

Now a high school senior, her waterskiing career began at age seven at Conneaut Lake where her parents bought a summer home. A small girl then, her first skis were custom made and were only slightly over two feet long. Bob Lilly, a summer neighbor at Conneaut whose son Bob Jr. was a tournament skier and Eastern Regional champ about 10 years ago, served as her instructor. A year later she was "seriously interested in skiing" and proceeded to win third spot in a tourney she entered. Her talents quickly turned to skill—top quality skill—and ever since age nine she has never placed below first in the Eastern Region in the tricks, jumping and slalom categories, although she has now discontinued jumping due to a bad knee.

In 1964 she was the National Junior Girls' Trick Champ and then last year she captured the National title in trick and slalom skiing.

A member of the President's Fitness Club, she also last year won the 440 yard running race in the Girls' Junior Olympics at Jamestown, N. Y. She also serves as a cheerleader for her high school at Bellevue in Pittsburgh.

During the summer she performs nearly every weekend in skiing events and practices daily from 7 to 10 A.M. at Conneaut Lake. She belongs to the Sandy Lake Club and often teams up in activities with Bonnie Lombardo, another high school performer from New Castle.



SKIING BACKWARDS at approximately 20 miles an hour is no problem for a skier with Maggie Jorden's abilities.

by
THAD
BUKOWSKI





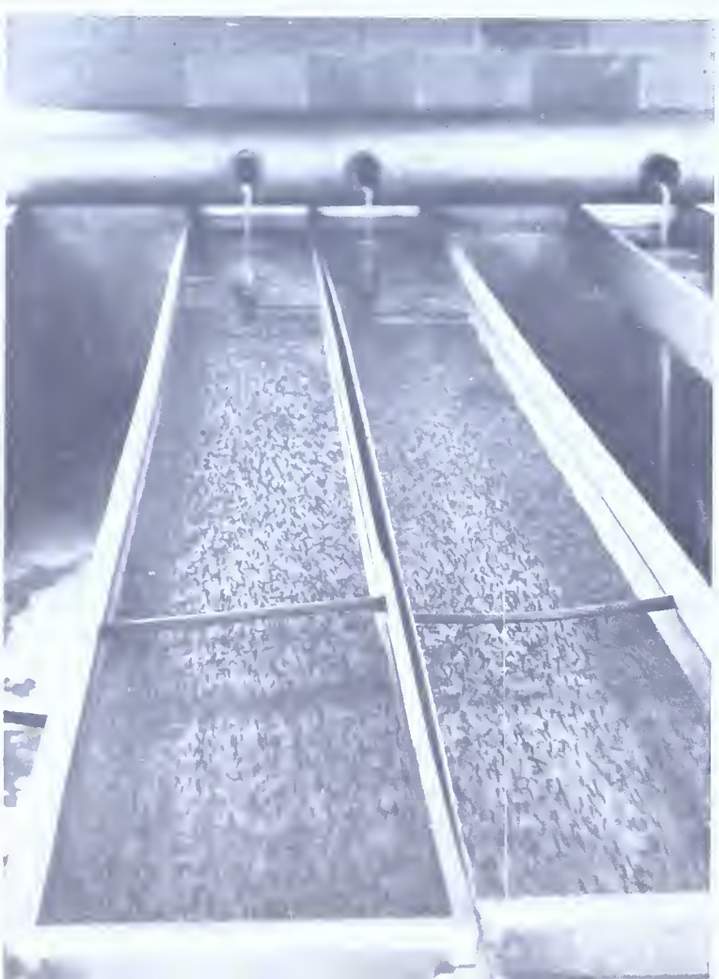


FROM LEFT TO RIGHT she does a toe back, wake step over and the clears the wake while practicing on Conneaut.

THIS ABUNDANT spring (above) provides most of the water at the recently purchased Oswayo Springs Hatchery in Potter County. Until new facilities are built old troughs (below) are being used to rear trout for delivery to cooperative nurseries as well as for stocking in the northcentral part of the state. Old h atchery building (lower right) has been repaired for temporary use, but will be replaced with modern, new facility.

THE OSWAYO HATCHERY

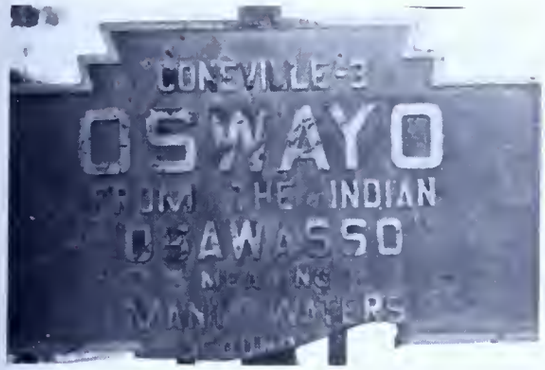
NEW FACILITIES PLANNED



In 1968 the Pennsylvania Fish Commission purchased an existing trout hatchery at Oswayo, Potter County, in order to obtain the Oswayo Springs which are probably one of the largest of any freestone springs in the Commonwealth. The Pennsylvania Fish Commission plans to develop this site into a modern hatchery as soon as time and money are available but in the meantime, the old structures have been temporarily repaired and put into operation so that the hatchery could produce limited numbers of trout for cooperative nursery programs as well as for local stream stocking.

The Oswayo Hatchery will someday be a prime tourist attraction besides rearing large numbers of fish.







OLD HIGHWAY SIGN (above) marks road entering town of Oswayo, so named from the Indian name Osawasso, meaning "many waters." A second spring, (right), somewhat smaller than the main source, provides additional water. Fifty gallon drums and old ponds (below) used a number of years ago by the previous owner have been put into temporary use until new facilities are complete.

by KEEN BUSS, *Chief, Fisheries Division*





INTERIOR OF hatch house was cleaned and prepared for temporary use last year following purchase of property. Now a battery of troughs line the building (right).





MODERN CAMPING by DEL & LOIS KERR

PINCHOT STATE PARK

CONSERVATION IN PENNSYLVANIA and, to a large extent, in all of America owes its origin to one man, former Governor Gifford Pinchot. He was the first professional forester in America and responsible for suggesting to Theodore Roosevelt most of the conservation practices set forth in that administration and still followed today. To him conservation was the "key to the future."

We believe that Gifford Pinchot would be pleased with his living memorial in Pennsylvania—a 2,250-acre state park in northern York County. He believed that natural resources should be wisely used to provide "the greatest good for the greatest number of people for the longest time."

What could be a more fitting tribute to such a man than a state park which provides a wide variety of recreational activities to people from all walks of life who love the outdoors?

Gifford Pinchot State Park, located between York and Harrisburg, is reached by State Route 74 north from York or by Interstate 83 and Route 177 from Harrisburg. The park was first established in May, 1961, and dedicated by then Governor David Lawrence. This spring a 350-site campground was opened. This is evidence of the Commonwealth's desire to follow in the Pinchot tradition by modernizing parks to meet the increased needs of the present generation of outdoor-oriented people.



". . . NOW LET THE DOUGH COOL AND MAKE INTO SMALL ROUND BALLS."

Gifford Pinchot State Park's terrain varies from forested hillsides to rolling farm country. Outstanding recreational feature of the park is a 340-acre lake with an irregular eight-mile shoreline.

The new campground is located one-half mile off Route 74 on the western shore of the lake. Many of the sites are directly on the shoreline of a bay. All sites are located in close proximity to the water and within short distances of bathing beaches and boat launching sites.

Seven modern sanitary washhouses are conveniently distributed throughout the huge camping area. Two beaches provide a total of 3,200 feet of bathing area. Boating and fishing are both popular at the lake. Rental concessions and launching facilities are easily accessible.

The lake is stocked with such popular warm water species as muskies, northern and walleye pike, large and smallmouth bass, bluegills, sunfish and several types of catfish.

For the hiker there are four nature trails with trailside markers. Maps and guides are available which describe interesting points along these footpaths. Rest shelters and benches are conveniently located along these trails so that even the elderly and young children can enjoy the walks.

Winter sports are particularly popular at Gifford Pinchot State Park. There is a 1,300-foot toboggan chute. Ice skating and ice fishing are also enjoyed on those chilly snow-covered days. And not far from the park is Ski Roundtop, a ski resort for those who like to take to the waxed boards.

OTHER ATTRACTIONS

An interesting sidelight is the fact that the northwestern boundary of the park was the first of the famous "farm-to-market" roads established during the second administration of Governor Pinchot. The paved road replaced an old plank road which the early Quakers used. An old dirt road paralleled the plank road and was known locally as the Quaker Race Road.

Quakers used to race their buggies on that road on the way to the Warrington Meeting House. The meeting house near Wellsville was built in 1762 and is in use today.

Nearby, the Susquehanna River from Harrisburg south to the Maryland border is well known for its fine catches of musky and bass.

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THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

WILDWATER TRAINING—

There's a small stream in Centre County, one narrow enough for youngsters to cross over on an old fallen log, it can be waded if necessary, a flat stone can easily be skipped from one side to the other, fishermen find its grass-lined banks an ideal place to enjoy a hot afternoon or evening and, finally, it's probably one of the busiest boating areas in Pennsylvania.

Described is a small stretch of Spring Creek, just outside Bellefonte, the authorized training waters for the Wildwater Boat Club where club members, from early spring and into the autumn season, can be found paddling their canoes and kayaks as they practice and keep in shape for the competitions ahead.

Unfortunately the efforts of the club haven't received as much publicity as they deserve and few people, even those of the immediate area, are aware of the work being done by these devoted youths to achieve national and international fame.

During a visit last April I somehow failed to recall the directions I had been given over the telephone and made one or two stops to seek advice. Both failed to provide the necessary results but a small youngster, in a baseball uniform, knew exactly where I could find the club's quarters and headed me in the right direction.

Bear in mind that it takes time for any organization, with limited funds, to get something accomplished. Therefore there are no indications that this is the site of the Wildwater Boat Club's quarters.

I arrived about 5:30 P.M. and one of the first members I met was Steve Draper, of State College, who, nestled in the cockpit of a kayak, explained some of the rudiments of the sport.

Before long Steve was joined by at least a dozen members, from the Bellefonte-State College area, shouldering their C-1s, C-2s and kayaks across the railroad tracks and along a narrow dirt path to the water's edge.

Among the participants was the man responsible for promoting wildwater canoeing, Dr. David A. Kurtz, an assistant professor of chemical pesticides at the Pennsylvania State University.



TWO BELLEFONTE HIGH SCHOOL coeds take time out to watch other members of the Wildwater Boat Club maneuver their craft through one of the gates strung along a small stretch of Spring Creek, near Bellefonte, the club's training waters.

Dr. Kurtz, after a few rapid calisthenics, apparently designed to "limber up his joints," slithered into the cockpit of a C-2 (a two-place canoe) and paddled off with Les Bechdel, of State College, handling the stern.

Ever try to interview someone as active as Dr. Kurtz?

It's probably easy if you have a canoe and can keep abreast of him and his partner. Otherwise you sit on shore and call out questions as he passes.

This beehive of activity had its start in 1963 when the Wildwater Boat Club was formed under the direction of Dr. Kurtz. Made up largely of junior and senior high school students, with a minimum age limit of 11 years, the club has about 15 active members who participate in many of the state and national competitions.

There are other similar clubs in Pennsylvania but Dr. Kurtz's organization is perhaps the only one having a specific, authorized area set aside for training purposes—training which is paying dividends in the fine showing these

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Notes FROM THE STREAMS

SECOND LIMIT—

■ One of my special waterways patrolmen was fishing a local area, when he started a conversation with a nearby fisherman. The fisherman said he was one short of having his limit and as they talked he accomplished this task. Without batting an eye he returned to fishing, telling the special, who did not have on a uniform, that if the warden came he would give him some of the fish. The "special" of course refused so the fisherman headed home stating as he left that if he wasn't so tired from a heavy work schedule he would take this limit home and return for more. I would like to see this gentleman's face one day when said deputy happens to check him in uniform, or better yet, apprehends him.—***Waterways Patrolman SAMUEL W. HALL*** (Lancaster and Lebanon Counties).

HEALTHY SHAD

■ For many years, I have listened with a great deal of interest as many of the "old timers" talked about shad fishing "years ago, in the Juniata River." This past month I have spent many hours watching our Commission's shad restoration program and have been amazed. Our biologists have delivered countless thousands of shad eggs to this district and I place them in hatching boxes in the Juniata River. After four or five days I take samples of the eggs to determine hatching percentage, and find the vials are full of eyed eggs and tails.

A restored shad fishery in the Juniata River may not become a reality soon, but I am thoroughly convinced that if we can get the adults up the river, they will spawn and most certainly will hatch.—***Waterways Patrolman RICHARD OWENS*** (Mifflin and Juniata Counties).

AGGRESSIVE DEFENDER

■ A biologist from the Philadelphia Academy of Natural Science making lake studies in Wayne County made this remark about the smallmouth black bass on its spawning bed. He said that he could skin dive right up to the nest and one young male fish guarding the nest would grab a hold of his glove covered finger and shake it as hard as it could. He remarked that the smallmouth were much more aggressive than the largemouth black bass.—***Waterways Patrolman HARLAND F. REYNOLDS*** (Wayne County).

CAUGHT IN MIDDLE

■ While stocking trout recently, one of the persons assisting with the stocking told me that a few years ago he saw two water snakes trying to swallow a trout. One was at each end of the fish. He asked me what would have happened when they reached the middle of the fish. I told him he should have waited a little longer before killing the snakes.—***Waterways Patrolman WALTER J. BURKHART*** (Monroe County).

BIG INCREASE

■ A good indication of the expanded interest in winter trout season took place at the Ridgway Reservoir this year. On opening day of the winter season this year a total of 75 fishermen took advantage of this excellent fishing. On opening day of the 1967 winter season only four persons showed up—some increase!—***Waterways Patrolman BERNARD D. AMBROSE*** (Elk County).

FAST MOVER

■ In early May Waterways Patrolman Murawski made arrangements to settle a Fish Law Violation at the Ebensburg State Police Sub-station. The defendant appeared promptly at the exact time previously agreed upon. In a surprised tone he asked Murawski how he got here so fast since he just heard him on a Johnstown radio station. Tony just replied, "we get around." He forgot to inform him the show had been taped earlier in the week for broadcast at that time!—***Regional Supervisor JOHN I. BUCK*** (Region II, Somerset).

REAL "FISH HOGS"

■ While doing law enforcement work with Game Protector Erickson, following the stocking of Stevenson Dam, we observed three men catch and kill their limit of 6 trout and leave the dam. About two hours later a State Police Officer on his day off who was fishing the dam notified us that the men had returned. Upon checking them we found that they had all taken another limit of trout. We checked the camp and found 58 trout in their possession, as well as a short brook trout. It is this type of "sportsmen" that rob our honest fishermen and steal the enjoyment of fishing for others. I had no mercy on the trio upon apprehension —they settled on field receipts.—***Waterways Patrolman STANLEY G. HASTINGS*** (Cameron County).

MOUTHFUL!

■ A 25 inch smallmouth bass estimated at 7 pounds was taken from Cloe Lake prior to the opening of the 1969 bass season. The fish was caught when an angler's sinker became entangled in an assortment of fishing tackle hanging from the fish's mouth. After landing the lunker, the angler removed two spinners, two snelled hooks and a treble hook from the fish before returning it to the water.—***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County).

OYSTER CRACKERS!

■ A fisherman told me that while fishing Lyman Run Lake he was catching a few fish while a man and wife fishing nearby weren't doing too well. Finally they asked what he was catching his fish on and he told them oyster crackers. The woman said they didn't have any but they did have cheese, corn, and worms. The last the fisherman saw of them they were leaving in a cloud of dust headed for Galeton and some oyster crackers.—***Waterways Patrolman KENNETH ALEY*** (Potter County).

TWICE A DAY!

■ While on patrol with Special Waterways Patrolmen Fink and Sharp, we apprehended two persons fishing without licenses in the Neshaminy Creek. Their rods were seized as evidence and the two were released after preliminary arraignment before the nearest available Justice of the Peace. After two hours more of patrol, we went to the marina and launched the patrol boat for refueling. Most of the docks were still closed for the season and we had to travel to the Delaware Yacht Club before refueling. As I started to leave the dock, SWP Fink tapped me on the shoulder and pointed to the same two persons fishing from an old pier. No introduction needed this time—we again seized their rods and took the needed information. As we left SWP Fink replied, "They're bound to give up breaking the law pretty soon, we're running them out of rods."—***Waterways Patrolman JAY B. JOHNSTON*** (Bucks County).

SECOND CHANCE—

■ While acting as official judge at a fishing contest held at Hopewell Township Community Park, a young lad came up to Special Waterways Patrolman William McLaughlin almost ready to cry and said, "A big fish just pulled my pole in the water." With some doubt in mind McLaughlin asked, "Did you see it happen?" The boy replied he was getting a drink when it happened. So McLaughlin said, "You better check with some of your buddies because one of them may have picked it up while you were gone." About ten minutes later, the same lad came back with a crowd of boys following behind. In the boy's hand was a large fish. "Now do you believe me mister?" questioned the youth. The lad fishing next to him had snagged his line and pulled out line, rod, reel, and a carp. With a somewhat red face, McLaughlin measured the 22 inch fish that won the $25.00 first prize. The two boys decided to split the prize money.—***Waterways Patrolman DONALD PARRISH*** (Beaver County).

ZIP CODE REGISTRATION—

■ While on patrol of the Susquehanna River at Harrisburg I noted that one of the boats in the water appeared to have an unusual registration number displayed on the bow of the boat. Upon checking the operator of the boat I inquired as to how he had found the registration number that he was using? He replied that the number was the one issued to him by the Department of Revenue whereon he pointed to his registration certificate which not only contained his correct registration number but also his zip code which he had mistaken for the correct number. After he noted the error he had made he stated that he might try mailing his boat to a friend.—***Waterways Patrolman PERRY D. HEATH*** (Cumberland and Perry Counties).

MORE ZIP CODES—

■ While patrolman Houck and I were on routine boat patrol on the Delaware River we checked one boat on which the number proved very interesting. The Post Office Department should be proud of this man because he had his zip code perfectly placed on his boat. Who says the zip code is not being used?—***Waterways Patrolman JOHN W. WEAVER*** (Northampton County).

BACK LATER!

■ One storekeeper along the Susquehanna was quite surprised one day when a fisherman rushed in, grabbed the biggest net she had in the store, on which the price was not marked, threw down $15.00 and hollered as he ran out the door "I'll be back to settle up later." The fisherman did come back. It seems that his companion had hooked a 36 inch musky and was busily playing the fish on a 4 lb. test line when they discovered they had no way of landing the trophy. Hence a quick dash to the store and their triumphant return the second time to collect their change for their now "used" net.—***Waterways Patrolman H. PORTER DUVALL, JR.*** (York County).

DIFFICULT NAMES?

■ Some fishermen seem to have difficulty pronouncing the names of fish properly. Last year an elderly gentleman asked me if we could possibly get some *Coconuts Trout* (Kokanee) to stock in Whipple Dam. Recently another fisherman complimented the Fish Commission on the beautiful *Malarino Trout* (Palomino) we were stocking.—***Waterways Patrolman JAMES T. VALENTINE*** (Huntingdon and Fulton Counties).

SNOWMOBILE—

■ With the coming of the snowmobile last winter I felt like the last of the foot soldiers in this area. Almost every fifth or sixth car that passed had not one but two snowmobiles on the trailer behind. When I started walking across a lake to check ice fishermen, I felt a little like a hitchhiker walking along a superhighway. They caused some disturbance to ice fishermen when they passed too closely to a tip-up causing the flag to pop up but since so many fishermen had these machines, I have received very few complaints. The snowmobile made lakes that I could not get within miles of readily accessible to fishermen who could not take advantage of them before. And even more are expected this year!—***Waterways Patrolman JOSEPH E. BARTLEY*** (Pike and Wayne Counties).

SLEEPLESS WINTER?

■ One of the days that was sunny at the Shawnee Lake last winter while associating with ice fishermen I saw a groundhog quite a distance from the shore. Several days later, at the same lake, two groundhogs were seen playing on the ice. Finally one drank from a hole in the ice and within several minutes both animals left the lake and disappeared over a small bank.—***Waterways Patrolman WILLIAM E. McILNAY*** (Bedford and Fulton Counties).



HIGH SCHOOL WORKERS

BOYS FROM Tyrone High School's senior class joined in fighting the litter battle last spring when they undertook a field project of "picking up" Bald Eagle Creek in Blair County. The group, all enrolled in a Vocational and Nature Education Class and under the supervision of science teacher Richard Barrett, gathered litter and debris left along the waterway as a practical lesson in conservation.

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LEAKY BOOTS—

3. I do not have anything against bait or lure fishermen and did not intend to imply that those that use bait or lures are "fish-hogs." (I'm sure that a certain number of fly fishermen could also be classified as such).

4. Fish-for-fun streams receive only the same ratio of trout per surface area of water as open streams and in some instances even less. The reason that fishing remains good at these areas throughout the season is that (other than 20 inch plus trophies) *no fish are intentionally killed.*

5. Fish-for-fun areas provide 100%-*plus* return on stocked fish. That is, if one is willing to concede that hooking and landing a fish and then carefully returning it to fight again can be considered "return." Also, a goodly number of fish filter out of these projects to be caught in the open water.

6. The Fish Commission does not do a good job of spreading the trout out when they stock streams. I've witnessed 8 or 10 stockings and at every one it's always the same old story: "Let's go fellas. Get those buckets back here, we're in a hurry." How can a stream be effectively stocked if the hundreds of sportsmen who attend these stockings aren't allowed to take the time to walk a bucket a few hundred yards upstream or down?

7. Griping has its rewards. It wasn't too long ago—1959 to be exact—that the Fish Commission was extremely concerned with a drastic reduction in license sales. (That's real griping!) Shortly thereafter the Commission embarked on its present enthusiastic warmwater program (which I'm entirely in favor of) and this provided a shot-in-the-arm as far as license sales were concerned.

But what is the Commission doing now to conserve the remaining trout streams in our state—to assure us that they'll still be running clean and pure 20 or 30 years from now? What is it doing to restore beautiful Slippery Rock Creek, Scrubgrass Creek, the Clarion River and others too numerous to mention? What is it doing about restoring the fantastic mayfly hatches that once were commonplace on Spring Creek in Centre County? What is it doing to introduce new species of aquatic life into our streams and lakes so that we may stock with fingerling trout instead of having to espensively hatchery raise fish to a catchable length?

No money you say? Well how about a trout stamp; or maybe we could call it a conservation stamp. A fee such as this certainly couldn't be objectionable when we all know that it's going to provide a badly needed service.

Mr. Naughton states that in Washington they stocked a particular lake with 125 million fingerlings (125 million?) A bit of quick arithmetic tells me that if only half of these trout survive to legal length, that 100 fishermen catching a total of 1,000 trout per day, and fishing 365 days a year, couldn't catch all of these fish in 170 years! Really, isn't this just a little out of Pennsylvania's class?

It's also interesting to note that Mr. Naughton's angling partner sees a need to release the steelhead he catches so that he, in his own small way, may perpetuate the fishing on his waters. Or maybe he's releasing them so that others may enjoy catching them?

My suggestions for improving trout fishing in Pennsylvania aren't meant to favor any one group of anglers. In fact, many bait and lure fishermen feel as I do. It's important to me that every angler be afforded good trout fishing—whether he uses bait, lures or flies is not important. Whether he be novice or expert, male or female, child or adult doesn't matter, just so he may experience good fishing—not just in the first 6 or 7 weeks of the season—but rather *all summer long.*

I'd suggest that anyone who sees no reason to advance in this state in the fields of trout management and stream improvement and research has no foresight. Certainly we have some good fishing here—but it's not as good as it can or should be. Being satisfied with the status-quo is no virtue of mine. I've watched too many of our streams ruined and heard too many expressions of discontent to not be worried. I may not be 100% right, but I'd be willing to wager my favorite fly rod that when the last card is turned, neither am I 85% wrong!

Respectfully yours,
Ronald S. Kommer, Darlington



SPECIAL EVERYONE SEEMS to be getting in on the act when Pennsylvania's trout season opens nowadays, but perhaps one of the most interesting ideas spotted by PFC personnel this year was this "Trout Season Special" on display opening day in a Shickshinny car dealer's lot. (photo by Clair Fleeger)

WHETZEL ELECTED CONSERVANCY PRESIDENT

Western Pennsylvania Conservancy has announced the election of a new President, Joshua C. Whetzel, Jr., to succeed Dr. Charles F. Lewis who has resigned for reasons of health.

The Conservancy made the announcement following a meeting of the Board of Directors in June. By unanimous consent, the Board elected Dr. Lewis President Emeritus of the Conservancy. He remains a member of the Board of Directors and will continue to provide counsel and guidance.

Mr. Whetzel, 48, has been Secretary and Treasurer of the Conservation Foundation, Washington, D. C., and a member of their staff since January, 1967. As an officer of the Foundation, he has participated in determination of its policies and the administration of all its programs.

Mr. Whetzel was born in Pittsburgh and lived here all his life prior to moving to Washington. In 1948 he helped to found Allegheny Refining Company in Verona, Pa., engaged in reclaiming and refining waste palm oil. He remained a partner in this company until it was sold in 1963.

Mr. Whetzel has been associated with various civic and cultural organizations. He was trustee and treasurer of the Ellis School; a member of the board and finance chairman of the Three Rivers Arts Festival; a term member of the Museum of Art Committee of the Board of Trustees of Carnegie Institute; and a former deacon and Sunday School teacher at Shadyside Presbyterian Church. Mr. Whetzel is a chemist by profession, having taken his Bachelor of Science in Chemistry at Virginia Military Institute and graduate work in chemistry at the University of Pittsburgh. During World War II, he served as a lieutenant, field artillery, with service in the European Theater. Mr. Whetzel and his wife, the former Anne Farley Walton (also of Pittsburgh) have four children, who share with them a deep and active interest in camping, hiking, nature study, and other outdoor activities. He has been a life member of the Conservancy for several years.

A SPORTSMAN

S is for the *SPIRIT* that's within him
P is for the *PRIDE* the name implies
O is for the *ORDER* that's his guidepost
R is for the *RIGHT* which it abides
T is for the *TRUTH* for which he stands
S is for the *SAFETY* that he strives
M is for the *METAL* that he's made of
A is for the *ACTS* on which he thrives
N is for the *NAME* he's always known by
Put them all together they spell SPORTSMAN
The revered name of those who will not live a lie.

—Leo A. Luttringer

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MODERN CAMPING

Also nearby the city of York overflows with historic tradition. Laid out at the request of William Penn's grandson, Springett Penn, it was the first city west of the Susquehanna. From September 1777 through June 1778, York served as the first capital of the United States.

The historic society of York County has one of the finest museums in the state. It is open Tuesday through Saturday, 9 A.M. to 5 P.M. An outstanding feature is a life-sized colonial street scene with seven buildings including an apothecary, printing, toy and cabinet shops, a tavern, firehouse and cabin, all in authentic detail.

York County attractions also include barns with brick ends built in the 1700's, covered bridges, a re-created little red school house and Hanover Shoe Farms where racing horses are bred. The Wrightsville Bridge across the Susquehanna River is the longest multiple-arch concrete bridge in the world.

Colonial Valley at Menges Mills features an old mill which has been operating since 1740, a working sawmill, a fully-equipped blacksmith shop and a general store. Colonial Valley is open daily from 9:30 to 5:30, and 12:30 to 6:00 on Sundays from April through November.

COMMISSION MEETS AT HARRISBURG



WATERWAYS PATROLMAN Samuel W. Hall of Lancaster County was presented a Citation by the Pennsylvania Fish Commission at its July meeting for his heroic efforts in saving the lives of a man and woman when they upset their small boat while fishing at Speedwell Forge Lake in Lancaster County near Lititz. Hall, left, ran to the lake from his nearby home and swam to the couple when he heard cries for help. His quick reaction and help in getting them to shore resulted in the survival of both, although the man was hospitilized for several days. The Citation was presented by outgoing Commission president Douglas McWilliams of Bear Gap.

EXTENDS SEASON

AN EXTENDED TROUT FISHING SEASON, starting September 2 and ending October 31, 1969, and establishment of fishing season dates, creel limits, and other regulations for 1970 highlighted actions taken by the Pennsylvania Fish Commission at a meeting in Harrisburg July 28.

In approving the extended trout season for this fall, the Commission added to the list of 74 streams and lakes opened last year, all approved trout waters in the following counties: Adams, Berks, Bucks, Cumberland (except Big Spring Creek), Dauphin, Franklin, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Perry, Philadelphia, Schuylkill and York. In further liberalizing trout fishing during the extended season, the Commission removed size restrictions on lakes, thus permitting trout fishing in all lakes and ponds regardless of size; set catch limits for all waters open to extended fishing at 3 per day (last year it was 3 per day on lakes and 6 per day on streams); and offered the same privilege for extending, upon written request, the season to clubs owning private streams or lakes.

In other action, Clarence E. Dietz of Bedford, was elected to a one-year term as president of the Commission, succeeding Douglas McWilliams, of Bear Gap, in the presidency. Frank E. Masland, Jr., of Carlisle, was elected vice-president.

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SEA BAG

youngsters are presenting in competition with older, more experienced paddlers.

Since its beginning the Wildwater Boat Club has won the support of the Bellefonte Recreation Commission which, realizing the value of outdoor sports and this type of program in particular, has leased to the club the building it uses as a headquarters.

At present the building is used mostly for storage of equipment—boats on racks of twos and threes, gates and paddles—but Dr. Kurtz holds out hope for eventual improvements to include a meeting room, showers, lockers and other facilities the club may require.

When the club was formed many of the members purchased their own craft but soon realized that equipment for competitive canoeing, like any other sport, can become quite expensive.

Then they decided to build their own and a member's basement was utilized for this purpose. Later this phase of the game was transferred to the present day headquarters where C-1 and C-2 craft, of fiberglass and epoxy resin, are turned out at perhaps less than half the cost.

These fiberglass canoes and kayaks, with buoyancy sometimes supplied by an inflated ball stuffed up under the bow, are tough and can take quite a severe beating. If punctured it's apparently a simple matter to lay on a patch, smooth it out and the boat is as good as new.

Competitive slalom and wildwater (straight) both appear to be quite strenuous and both require practice, practice and more practice.

Gates are used in slalom meets and, in my opinion, they're not quite wide enough. However, while watching the practice session, I noticed these youths were adept at maneuvering between the gates, sometimes even stern first, without picking up a penalty point.

Two types of gates are used. Regulars, which hang across current, which have a maximum opening of four feet; and flush gates, strung parallel to the current, which may have a maximum opening up to 11.5 feet.

Since the club was started by Dr. Kurtz its members have been getting around. Transportation is needed, so that during a recent membership drive they were looking not only for active canoeists but older persons who could lend their support and also provide transportation to in and out-of-state matches.

This has been a good way to get the parents interested. Although they may be unwilling to wiggle into one of those cockpits they may be keenly interested in going along and adding some vocal support from the shoreline.

It's a good way to unleash a lot of pent-up energy and goes a long way to promote physical fitness in this day and age when it's much easier to push a button or turn an ignition key.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



BIG CHANNEL CAT was landed by fisherman John Foster (left) of Meadville while fishing Pymatuning in May. Fishing with Jim Gore, also of Meadville, he caught the 31-in. catty as well as some others, all on a nightcrawler. Kettle Creek produced 28-in., 7½-lb. rainbow trout for angler Earl Brown of Renova (right) early in May. It took a worm. Shown with Mr. Brown is "fishing buddy" David Krepps on the right.





TIOGA COUNTY'S Hill Creek Lake is where Jersey Shore fisherman Fred W. Haller caught 45-in. 24½-lb. muskellunge. It won him a Pennsylvania Angler Fishing Citation and membership in the Husky Musky Club.



BIG CRAPPIE was caught by angler Louis Baumgartner of Sharon while fishing the productive new Shenango Reservoir in Mercer County. It measured 17-in. weighed 2¾-lbs., and hit a minnow.



THOMAS DYER of Cromwell Heights holds big stringer of crappie taken while fishing the Kinzua near the Hodge Run inlet early in June. Bait used was not listed.



CAROL SENSENIG, 11, of Etters holds 16-in. 2-lb. brook trout she caught on a spinner while fishing York County's Fishing Creek. She won a Junior Fishing Citation.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



MEDIA FISHERMAN William Ravenscraft holds 36½-in. 20-lb. carp he caught from Springfield Reservoir last spring that won him a Senior Fishing Citation.



NESCOPECK ANGLER Jacob Broyan landed this 26-in. carp on corn while fishing the Susquehanna River in Luzerne County.



BIG LARGEMOUTH was caught by Allen Russell of Emporium. It hit a nightcrawler and went 19-in. 4-lb., taken from Bush pond.



PAUL WELLER, 12, of Sharpsville, holds a 30½-in. northern he caught while fishing the Shenango. It won him a Junior Citation.



JOHN STRAILE, 11, of Rochester (left) holds a 10-in. ¾-lb. bluegill he took from Rosemont Pond on a worm while 5-year-old Johnny Rnaub (center) holds his "first fish," a 12-in. trout taken in mid-May on a worm from Fowler's Hollow. Paul Medich, 6, of Bessemer (right) won a Junior Fishing Citation for his 18½-in. rainbow trout taken on a nightcrawler from Bessemer Quarry in Lawrence County.

FISH TALES PICTURES

Pictures submitted to "Fish Tales" should be easily recognizable and neither too dark nor too light. All should be glossy prints—either black and white or color. Color slides and negatives cannot be used for reproduction.



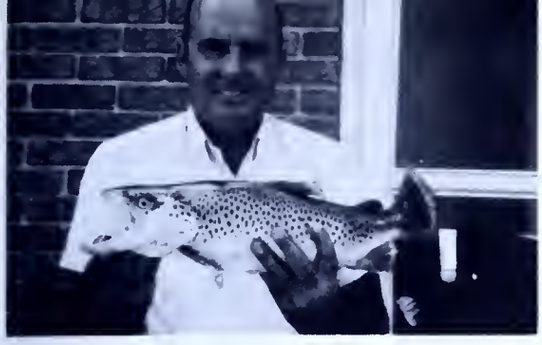
RALPH MYERS of Huntingdon holds proof that the "big ones" don't all get away—32 and 36-in. muskies from Point Access Area of the Juniata.



REGIS SCHATZ JR., of St. Marys holds the 21½-in. 3-lb. 8-oz. rainbow he caught June 9 from the Driftwood Branch of the Sinnamohoning. It had been tagged by the Bucktail Rod and Gun Club.



LITTLE FISHERMAN—big fish! David Moyer of Shoemakersville, age 4½, holds a 29-in. 5¾-lb. northern pike he caught at Ontelaunee Reservoir.



LESTER MARTIN of Shady Grove landed this 22¼-in. 4¼-lb. brown trout while fishing Muddy Run in Franklin County near Greencastle. Gear and bait used was not listed.



ALLENTOWN ANGLER Dan Booros holds a 22-in. 3-lb. 8-oz. shad taken from the Delaware on a shad dart.



ROBERT THOMAS, 13, of New Castle landed this 30-in. 6-lb. northern while fishing the Shenango Reservoir.



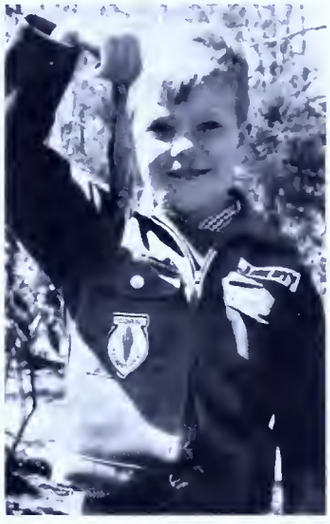
DUCANSVILLE ANGLER James Blackburn holds 26¼-in. 6-lb. walleye caught at Shawnee Park on a minnow.



MICHAEL SCHELL, 11, of Marysville holds 29½-in. 13-lb. carp he caught while fishing the Susquehanna.



WILLIAM KNISELY, 12, of Osterburg holds 36½-in. 16-lb. musky that won him a Citation and Musky Award.



JIMMY ULSH, 6, of Harrisburg holds his first fish, a 7½-in. brook trout caught in Lingle Run, Mifflin County.



ANGLER TIM HROMCHAK of Nanticoke, age 11, holds 25½-in. 6½-lb. walleye he caught last winter while fishing Lake Wallenpaupack.



JOSEPH A. CAROFINO, 8, of Ellwood City holds 27¾-in. 6½-lb. northern pike he caught while fishing the Shenango Reservoir in Mercer County this spring. It took a C. P. Swing.



GARY JURENOVICH of Sharon caught northern at the Shenango. It measured 28¼-in., weighed 5½lbs. and took a jig.



JOHNSTOWN angler Art Kzasa, age 14, holds 13-in. 14-oz. yellow perch caught fishing a Cambria County pond.



ALLENTOWN angler John Heilman, age 15, holds a 15-in. 1½-lb. brook trout caught on minnow from Little Lehigh.



MANCHESTER angler Clair Decker landed this 21-in. 3¼-lb. brown trout with spin gear fishing the Yellow Breeches.



YORK FISHERMAN Stewart Knisley holds the 22-in. 4¼-lb. brownie from Muddy Creek. It took a minnow.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



KEITH D. MARKS, 16, of East Greenville landed this 21-in. brown trout while fishing at Hereford in Berks County. It hit a worm.



PAUL REMALEY, 12, of Berwick took this 20-in. 2½-lb. brown trout from Huntington Creek Dam in Luzerne County on a Heddon Hep Spinner.



ALLENTOWN ANGLER Pauline Long took Citation shad while fishing the Delaware River near Milford. It measured 25¼-in. and weighed 6¼-lbs. It took a shad dart.







DAVID DEMARCO (left) won a Junior Citation for 10-in. rock bass he caught on a worm from the Susquehanna while Jay MacDougall (center) of Penn Hills holds stringer of 5 rainbows and 2 palominos he caught on Evitts Creek in Bedford County. William Klunk (right) of Hanover landed 29½-in. northern while fishing Codorus Creek Park with red and white spoon.



WILLIAM LUDWIG of Selingsgrove holds pair of big bass he caught while fishing the Susquehanna River in Northumberland County. Biggest won Citation and measured 21⅛ inches, weighed nearly 4 pounds. It hit a minnow.



LAWRENCE STANISLOW of Chester, age 13, won Pennsylvania Angler Citation for his 19½-in., 3-lb., 3-oz. brook trout caught in Big Bushkill Creek.



BIG RAINBOW was taken by Philadelphia fisherman James Farrell Jr., who was fishing the Wissahickon Creek in Philadelphia County. It measured 27⅛-in., weighed 7-lbs., 2-oz.



MIKE DAVIS, 14, of York holds 23-in., 5-lb. channel catfish he caught while fishing Pinchot Lake in York County in the spring. It took a minnow.





DREXEL HILL ANGLER Tony LaVerghetta took this 22-in., 3-lb., 11-oz. brown trout from the Wissahickon in Philadelphia County early in May. It fell to the temptation of a minnow. James Kitchen (right) of Delmont holds 36½-in., 11½-lb. northern he landed at Glendale Dam, Cambria County.



LARGE walleye, 27¾-in., 8-lbs., was taken by Harry Swallow of Sharpsville, fishing the Pymatuning.



BIG rainbow, 21-in., 3-lbs., was caught by Wilford Keel of Benton. It took a wet fly caught in Fishing Creek.



PAUL CLARK was fishing Bald Eagle Creek when he landed this 31½-in., 8¾-lb., musky on a Mepp's Killer.



MRS. ELSIE SWOPE was fishing Sweet Arrow Lake when she landed this 28-in. northern. Bait not listed.



STEVE VANPELT of Berwick holds stringer of perch and catfish he caught while fishing at Shickshinny Lake. Bait and tackle not listed.



DAN AND SONS hold three 14-in. perch caught at Lake Wallenpaupack last winter to become winners of Angler Citations. They are brothers Bill and Pete Chapla (left and right) along with dad, Pete Sr. (center). All were using live shiners.



CRAIG WALLOWER, 14, of New Cumberland holds 31½-in. 14-lb. channel catfish taken from the Susquehanna River in Cumberland County. It took a nightcrawler.



PIUS OLESKEY of Sharon, age 13, holds 27-in. 4½-lb. northern pike he caught fishing the Shenango River.



DANIEL DZURINDA, 13, of Sharon took this 28¾-in. 5½-lb. northern from the Shenango Reservoir on a spinner.



HAROLD WILLIAMS of Philadelphia caught this 14¾-in. perch at the Francis E. Walter Reservoir in Luzerne County.



STEVE SNYER, 5, of Duncansville holds the 15-in. bullhead he caught on a minnow while fishing Shawnee Lake.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER



PHILIPSBURG ROD AND GUN

MOST COOPERATIVE NURSERIES have a unique feature about them that make them all separate and different from each other. So it is with the Philipsburg Rod and Gun Club in Centre County. The feature—cement raceways which are built right out into the middle of a pond. There are trout in the raceways and trout in the pond to a total score of about 10,000 fish a year. Actually this is quite a workable arrangement. The small trout are handled in the raceways and the larger ones are maintained in the pond. The same water source is utilized for both areas. Feeders have a relatively simple job for no matter where food is dropped trout will be there to take it.

Dr. "Jack" Gette, a retired dentist and one of the original founders of the nursery, told a bit of the club's history. "Our organization started back in 1909 and we've been active ever since in a variety of outdoor interests. At the moment we have about 350 members involved in fishing and hunting projects.

"We first received fish from the Commission back in 1939. There were some seining problems in those early years which we have pretty much solved now. Of course, the raceways are easy to handle—its the pond that takes a bit of doing."

Mike Grabany, District Game Protector, broke into the conversation at this point to indicate that the nursery was located on Game Commission property, which was a bit unique itself. The parcel of land contains about 25,000 acres and is currently known as Grass City Game Refuge #33, Centre County. The Game Commission bought it in the early 20's and gave the club permission to use a portion of it for the nursery about thirty years ago. Mike reverted back to his chief interest, the big game of the area, with a tale of a recent bear-kill where the old black was one of the biggest taken in the area for years. But it was the cooperative trout program that was the main issue so Paul Swanson, local Waterways Patrolman, picked up the thread of the story:

"The boys are currently raising about 10,000 fish equally split between brooks and rainbows. They stock a variety of area streams—some on the stocking list and some not. Cold Stream, Six Mile Run, Benner Run, and the Black Bear are some of the larger ones. Then there are a number of smaller tributaries such as Corbin Run and Trout Run that receive club fish."

Bill Richmond, chairman of the fish committee, working his way in from the walkway along the raceways, spoke of the water source and the chances for expansion below the nursery. "The water flows strong and good from Seven Springs into the pond and raceway. The overflow drops into a second pond just behind the Game Protector's house and serves at the moment as a catch basin for any trout that slip out of the holding pond above."

As Connie Blazosky, nursery manager, pointed out, this second pond would need a bit of work before it could be utilized. Some stumps would have to be removed; bulkheads to control water would have to be added; and some brush cutting would have to be done to make the site really functional. But the potential to expand is there and the club members are seriously considering enlarging their facilities.



SEVERAL MEMBERS of the Philipsburg Rod and Gun Club gather at their Glass City Nursery where some 10,000 trout are reared each year of stocking in Pennsylvania's public waters. Raceway along which men are standing extends into pond.

The trout were doing well on a mixed diet of pellets, venison and liver; but it wasn't diet alone that was producing the good growth. Obviously, a big part of the success story was due to the efforts and interests of the men mentioned above and other club members taking an active part in the nursery project such as Jack Maggs, Freddy Kenjora, Jim Hartle, Mike Madlena, Terry Irvin and others who assist or have assisted in maintaining the nursery, feeding or stocking as needed.

It was about time to go and the talk drifted from trout back to Mike's bear story and the hunting fever began to run its course through the men gathered on the misty hillside above the pond. April fishing was some months away and talk of leaders and baits fused with handloading and the .308 versus the .30-06 as the club members dispersed to their vehicles.

We took a last look at the raceway jutting out into the pond, dipped our cap a bit to the trout that were waiting for their "finest hour" in the spring, and paid a bit of final homage to the men of the Philipsburg Rod and Gun Club who are and have been making *Casting with the Co-ops* pay for Centre County anglers for thirty years.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Editor and Publisher of "Three Rivers Boating Guide"

FROM G. W. B., PITTSBURGH:

"What kind of anti-fouling paint can be used on the shaft and propeller of an inboard runabout?"

—The propeller and shaft should not be painted at all. In fresh water, the only bottom fouling is from algae and other soft vegetation, and the propeller wash will keep this cleaned off. Most anti-fouling paints contain soluble metallic salts that will corrode the propeller and other gear very rapidly, and even a few drops of bottom paint on the wheel can produce deep pitting in a short time.

FROM M. V. F., JOHNSTOWN:

"I am building a 23-foot cruiser from a kit, and could save quite a bit of money by using a Volkswagon engine from a wrecked car. What is your opinion on this?"

—Installing an air-cooled engine in a boat is a very risky proposition, since the manifold, exhaust header and other parts of the plant will have operating temperatures well above the flash point of gasoline. While it would be theoretically possible to make such an installation reasonably safe, it is doubtful whether any insurance company would be willing to cover the boat. You would also have considerable difficulty in assembling a suitable reverse gear and other accessories. A better bet would be to canvass the boatyards for a used engine that you can repair or rebuild.

FROM S. L. R., PHILADELPHIA:

"How can I take a tax deduction for the use of my boat while entertaining business guests; the principal use of the boat is for pleasure, but I do run up a considerable number of hours on business use?"

—The general rule applied by the Internal Revenue Service is that the boat must be used at least 50% for business in order to take a deduction. However, if the amount of money involved is significant, it may be worthwhile to set up a corporation to own the boat, and pay the corporation a set rate per hour for the use of it. You could then deduct the total amount paid for business use. We would suggest talking this over with a tax expert, to make sure all of the arrangements are legal.

FROM N. B. C., PITTSBURGH:

"I have recently purchased an amphibious vehicle and would like to use it on the rivers. Is any special license or equipment required, or is the auto registration plate enough?"

—Your amphib will have to be registered as a motorboat, and carry the assigned bow number. It must also meet all of the legal requirements for motorboats, including life preservers, fire extinguisher, carburetor flame arrester, ventilation, lights, etc. Most of the vehicles of this type we have seen will require at least some work to make them comply with the regulations.

FROM K. D. K., LOUISVILLE. KY.

"We plan to cruise upriver to Pittsburgh this fall, and would like to know whether the Pennsylvania laws require any special permit or equipment for our boat?"

—So long as your boat is registered with the State of Kentucky, and is properly equipped according to the laws of that state, you may use it on Pennsylvania waters for up to 90 days.

FROM S. M. L., PITTSBURGH:

"Our boating club would like to place buoys for a slalom water ski course on the river, out of the main channel. Do we need any special permit for this?"

—If you plan to set these buoys out for a few hours only, there would probably be no objection. However, if they are semipermanent, or even remain overnight, you will need the approval of both the Coast Guard and Army Corps of Engineers. A state permit may also be required, but we would suggest first approaching the federal agencies. If the proposed course and buoys would tend to create navigational problems for other boats, it probably would not be approved. A special regatta permit for such a course can be obtained for a period of a day or so, in the case of an organized show, but a semi-permanent layout of buoys would tend to obstruct the navigable waters, and be contrary to public policy.



"THEY'RE INSTRUCTIONS IN SMALL BOAT HANDLING!"

JUST ASK THESE COWS



They may not be able to talk, but if they could they would probably tell you they found the activities of the Pennsylvania Fish Commission most interesting one afternoon last fall when waterways patrolman Bryce Carnell of Franklin County and several other PFC employees conducted a conservation workshop for Gettysburg area teachers.

While the teachers (shown left) watched from one side of the stream the cows (shown top) watched from the other, as patrolman Carnell (in stream) and special waterways patrolman Rogers (not shown) conducted a population and stream survey with electro fishing gear.

While you may be neither teacher nor cow, you too will probably be interested in things the Pennsylvania Fish Commission does. It's easy to keep up with what's going on—subscribe to the Pennsylvania Angler. Already a subscriber? Help a friend —buy him (or her) a subscription!

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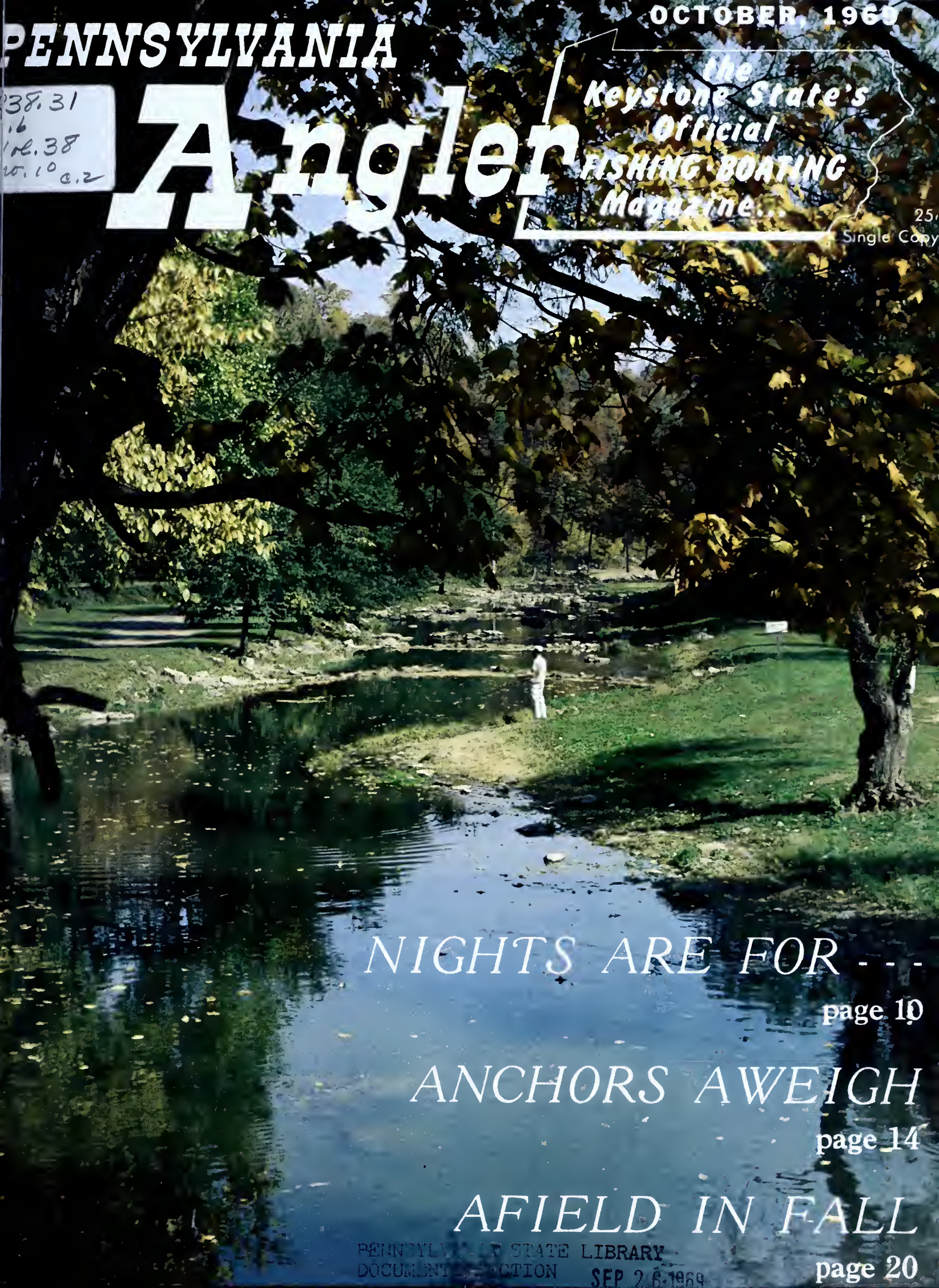
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OCTOBER, 1968

PENNSYLVANIA Angler

the Keystone State's Official FISHING-BOATING Magazine...

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DOCUMENTS SECTION SEP 26 1969

CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



GETTING INVOLVED

The word Conservation has beeome a mueh overworked term in the Ameriean voeabulary. It's the "in" thing today to get into the eonservation aet in some way or other. For many it's not really a matter of doing something, but more like getting on the popular bandwagon and going for a free ride.

Less than a decade ago conservationists were afforded littlc more than lip serviee by eleeted officials, industry and the publie in general. The problems of water pollution were readily by-passed as being unimportant or eeonomically unsound for industry and munieipal government alike. Air pollution control was eonsidered one of those things state and Federal bureauerats talked about to give the appearance their jobs were important and neeessary. In fact almost any conservation measure—sound management of soil, forests, fish and wildlife, water, air and minerals got the nod of agreement, but were usually forgotten or were dealt a light hand when it eame time to provide funds for these programs.

Prolonged drought, severe water shortages and raging floods have done mueh to aetivate Federal, state and local water management programs. The ugliness of water pollution in virtually every city of size and in some of our most beautiful recreational areas has brought forth cries for water clean-up programs.

Foul air and choking smog have foreed aetion to control air pollution before we smother ourselves in a blanket of noxious fumes.

Thus, even though a few free riders are jumping on the bandwagon to elean up our air and water and to use our lands and forests and other resourees wisely, we ean be thankful the bandwagon at last is truly moving. And we are making forward strides in overeoming major air and water pollution problems through outstanding efforts by many industries and eommunities.

However, lest it be forgotten how diffieult it was to stir general public awareness and eoncern for the environment, it should be noted many are still in dissent and are working hard to slowdown the clean-up program.

As an example a leading official in a major Pennsylvania city has publiely opposed an increased level of treatment of the sanitary wastes of that eity. The added eost to eaeh residential customer served by the city would annually amount to the eost of a ticket to a "pro" football game. Whilc the evidenee against DDT grows and many states have banned its use, there is continued industry denouncement of the massive evidenee of the subtle long term damage DDT has eaused in our environment.

With the elear evidenee that the internal eombustion engines of hundreds of millions of autos are a major source of air pollution their manufaeture continues. Corrective measures will only come with adverse publieity, legislative pressure and strong enforeement measures.

Reeently a U. S. Congressman, not a Pennsylvanian, in regard to atomic power plants dumping hot water into rivers commented that "if the publie is going to have eleetrieity it will have to *shut up* about eeologieal conditions."

Thus, while the conservation bandwagon is moving, at least in second gear, now is no time to relax our efforts.

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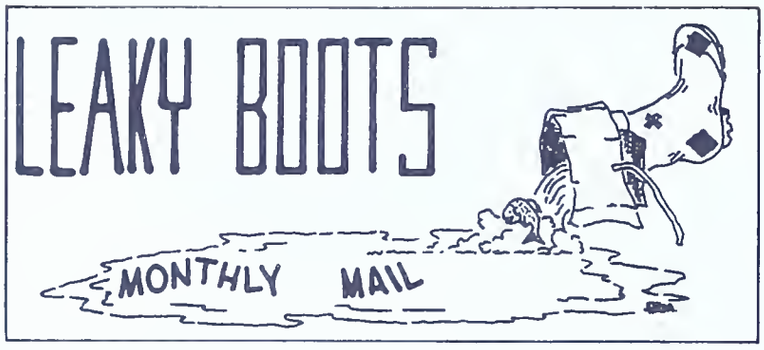
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Cover Photo/TOM EGGLER

D. THOMAS EGGLER, EDITOR

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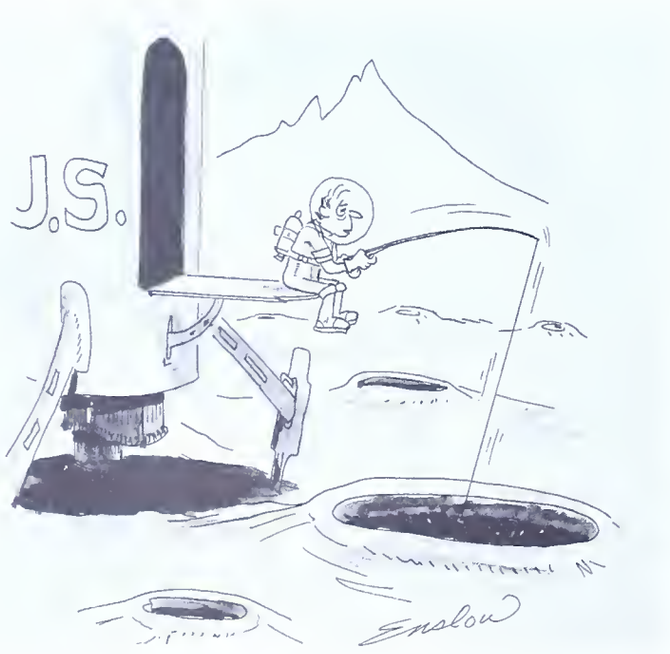
BAIT STORIES, PLEASE

Gentlemen:

I am a new subscriber to the Pennsylvania Angler. The reason I became a subscriber is that I read the Angler at different times at a relative's house. He told me what a good magazine it was and, that as a fisherman, I should get it every month.

Every issue I read from cover to back and I like it very much, but one thing bugs me. Surely there must be some other form of fishing than fly fishing. I have nothing against fly fishing. I think it's a wonderful way to fish, but what about all the spin and bait fishermen? I would venture to say that there are far more spin and bait fishermen (I stand to be corrected). Every story I read in the Angler on trout—or any other fish—nine times out of ten will be about fly fishing. I like to fish with live bait and at times I like to spin. I know there is an awful lot of money spent each year in Pennsylvania on bait and lures, so how about some stories for us bait and spin fishermen? I will not be a subscriber very long if I must always read about fly fishing. I want you to know I'm not knocking fly fishing, but by the same token it seems to me that you do not approve of anything but fly fishing as you have places where you can fly fish only. How about some places for bait and spin fishermen only? Hoping to hear something on bait and spin fishing soon.

Ernest Bonaddio, Pittsburgh



EXCELLENT EDITORIAL

Gentlemen:

Excellent!

That's the opinion of fellow Trout Unlimited members who read "Conservation Viewpoint" by director Robert J. Bielo in the July issue of the Pennsylvania Angler.

As President of the Allegheny Mountain Chapter of Trout Unlimited I hope the article helps the Fish Commission as a whole to develop a more definite position on matters of this type and importance throughout the entire state. I believe we owe this to our children, and their children.

My congratulations. Looking forward to many more stories of this caliber.

Terry Carlson, Publisher
Sykesville Post-Dispatch
President Allegheny Mountain Chapter
Trout Unlimited
Sykesville, Pa. 15865

RIDICULOUS LETTERS

Gentlemen:

I have read many ridiculous letters in your "Leaky Boots" section. I would like to review these letters from a "kid's" point of view.

First, I agree wholeheartedly with Steve Valencic's letter in the July issue of the "Angler." I believe that if someone has enough money to own a boat, he should also be able to afford to subscribe to a separate boating magazine.

Second the idea of a trout stamp is absurd. This would surely stop kids from a lot of fishing. What would a farm boy do if he wanted to go fishing and the only stream around had only trout in it? Many times transportation to another body of water is not available. The ironic part of this is that these same people who push this trout stamp are the ones who are against "fish hogs." This makes "fish hogs" of them.

Another disturbing fact is the growing controversy over what is the best way to fish—fly rod or spinning rod. Can't these rivals get together? All tackle has its own special merits which makes each worthwhile. I caught a 13 inch brookie last week on the very thing these aristocrats would never think of using (a worm).

I also get sick of hearing about polluted Lake Erie. I agree that something should be done about the pollution. However, the lake still harbors the largest edible fish in Pennsylvania. Although many refuse to face it, the lake holds the best big game fishing in Pennsylvania. Therefore I disagree entirely with Ronald E. Poust's letter in the April, 1969 issue.

I enjoyed and completely agreed with Mr. Naughton's letter in the April issue.

And last but not least I would like to see the minimum sizes for Citations appear more often and would like the "School's Out" brought back.

Steve Ebner, Tionesta

FISHERKID SPEAKS

Dear Sirs:

I'd like to comment about Mr. Jerome Grehl's letter to "Leaky Boots" in the July issue—about the trout stamp to get rid of fish hogs and *kids*. Mr. Grehl is probably the first one to growl when he sees the long-haired hippie. So I would like to ask Mr. Grehl if he would sooner see a kid be a bum or a fisherman? You can do bad being a bum but what are you hurting being a fisher*kid*? Mr. Grehl would probably be cutting his own neck with the stamp. It is people like Mr. Grehl that makes the young people turn bad.

A 12 year old kid.

Jay E. Brenner, Conestoga

KIDS FISHING

Gentlemen:

Must be your reader Jerome Grehl of Easton (July, Leaky Boots) never was a kid himself. No wonder the kids are delinquent if they never get anything but second best. I wonder if that man ever sired a kid? What a h— of a way to feel or attitude to take. He might better quit his bitching and take a couple of kids fishing. I personally think after some 48 years of fishing that the trout fishing is way over-rated for what you get out of it. I do feel the limit could be cut but you can always release a fish, 90% of the time anyway. Still a big creel full of trout, small or big, seems to build the ego of some people. When you start figuring on charging for every little fun the people have, it soon comes out that the affluent society enjoys it, while the working man, as they would say, "Let Them Eat Cake."

Hial Potter, Jamestown, N. Y.

A SALUTE—

Gentlemen:

I should have done this long ago, for it is far overdue—this letter is a public salute and a warm thanks to acting Waterways Patrolman Joseph Kopena and his deputies of Forest and Clarion Counties.

Joe and his men are tireless workers, and, as a fervent "fisherwoman" I, and many fishing friends are grateful to Joe and his deputies for the superb job they are doing.

Their "war on litter" is certainly helping to keep this small section of America beautiful and I sincerely thank them for the fine job they do in fish stocking and in attempting to thwart stream pollution, to name just a few.

As a final word—Joe's constant attention to duty is one of his most admirable traits and I dare say that his friends are legend and his only critics are those he's "caught."

Mrs. Dolores R. Lyons, Clarion

TOO MUCH BOATING!

Dear Sirs:

There is entirely too much boating in what used to be a fine fishing magazine, "*The Pennsylvania Angler.*" I personally believe that most fishermen are not interested in power boating and water skiing. As I am very much interested in the fish policies of the Commission, and the limited fishing articles appearing in the "Angler" are still excellent, I will continue to subscribe under protest.

John C. Redman, Gibsonia

BAIT EXPERIMENT

Gentlemen:

I have long felt that the best solution to increased fishing pressure is more fish-for-fun projects but at least some of these projects should be extended to include bait fishermen. If proper techniques are used the mortality rate of released, bait-caught trout could be held at an acceptable level. To prove my opinion I decided to conduct an experiment on the mortality rate of released trout caught by the use of natural bait.

Last year I wrote to you for help and Mr. Delano R. Graff of your Benner Springs Research Staff helped me. Among the information he provided was a reprint of an experiment by Mason and Hunt. They found that 66 percent of 200 deeply hooked trout released without the removal of a size 8 hook survived the four months until the end of the experiment. Only 11.5 percent of 200 trout survived from which hooks were removed. The average fish size was 5.7 inches. It was clear that deeply hooked trout should be released by cutting the leader at the jaw. This can easily be done by using a pair of fingernail clippers.

Could the use of smaller hooks also lower the mortality rate? During the spring and summer of last year I conducted my experiment by catching, tagging, and releasing trout into a private pond. The fish were then caught and released under fish-for-sport conditions. A fish caught again two weeks after it had been deeply hooked was considered as surviving the first catch. Sick fish that could be caught by hand and dead fish were removed and autopsied. Records were kept of all fish involved. Size 6 and 8 hooks were matched against size 12 and 14. Size 10 hooks were used as the control group. The results were:

	Deeply Hooked		*Superficially Hooked*	
Hook Size	*Number*	*Mortality*	*Number*	*Mortality*
Large 6-8	29	6	27	0
Small 12-14	25	1	33	0
Control 10	12	1	24	0

The average mortality size of fish was 11.9 inches.

I believe that with the proper regulations on fish hook size and method of release you could not only extend bait fishing to some fish-for-fun projects, but also they could be used to create put, play, and take fishing projects. Bait fishing on a fish-for-fun basis could be tested several hours to several weeks following a stocking, after which fishermen could catch and keep trout as usual.

Thomas R. Beninsky, Ringtown

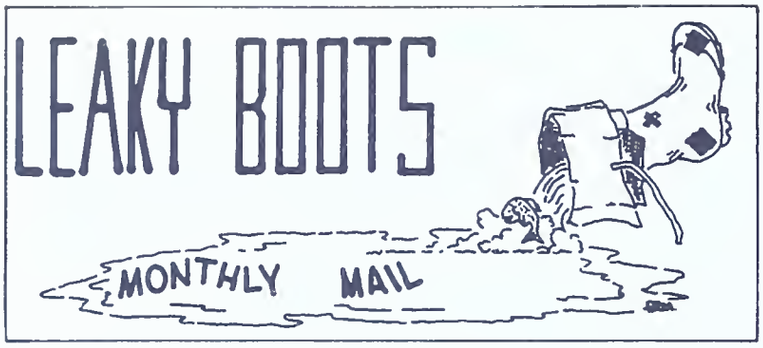
DEAD SNAKES—OR FISH

Gentlemen:

In reply to Mr. Tom Fegley's letter in the June Leaky Boots section it is interesting to note he finds this magazine such enjoyable reading as it contains pages of dead fish pictures every month. It is rather difficult to understand that these photos don't appear to bother him, yet he became highly upset and irritable at the sight of a picture of a dead copperhead snake I submitted.

I personally don't kill fish but use barbless hooks in my flies and bugs and return them to the water although I am

continued on next page



continued from previous page

tolerant of my fellow anglers who do kill their catch however.

Perhaps Mr. Fegley will ponder this, then decide to send letters to the angler scolding the fishermen who kill their catch—ha!

Edwin F. Beistel, Sunbury

HELPFUL LADY—

Gentlemen:

Last spring, I was fortunate enough to catch a nice musky. It was most pleasurable to have my eleven-year-old son along and to see the look of awe on his face. It was a nice fish, which you permitted me to brag about by printing its picture.

But a part of the story has never been told, and I think it should be. It's about the lady in a boat half-way across the lake who was watching the battle and hollered to ask if I'd like to use her large landing net. I had one, but not large enough for that musky. I told her I sure could use her "Whopper" net. As I glanced over my shoulder, I noted that the man who was handling her boat was rowing as fast as he could and I hoped he wouldn't over-exert himself.

They grabbed our boat and handed me the net. After we landed the fish, the lady told us that people had laughed when she bought the net, and her friends had laughed too, when she put it in the boat that morning.

It was certainly kind of her to loan it to us but the sequel came after we got our fish ashore and officially measured. We returned to the lake and then heard that the lady who loaned us the net had occasion to use it herself. She landed a 36 inch musky after we had left.

I didn't get her name, but am sure she must read the ANGLER for she seemed to be an avid "fisherwoman." Let me say for her benefit that the fish she caught couldn't have happened to a nicer person.

Donald R. Geiss, Mansfield

INSTALLMENT FINE

Gentlemen:

"Wash Away Garbage" on page 20 of the July issue was a good one. The laws should be changed. The property owner who permits or dumps along streams should be penalized at $1,000.00 for each offense, payable in installments. This way he would long remember what he did.

I know a camp in New York State that piles up it waste, downstream, so the high water when it runs will wash away the mess. To top it all, he's one of the town officials.

What's more, anyone reporting such disposal methods should get a reward of one third of the fine.

Valentine Botka, Jamestown, N. Y.

BEYOND HOPES

Gentlemen:

I am a native of Hanover and feel that I must commend the Pennsylvania Fish Commission on opening an entirely new era and concept of fishing in our locale.

Over the years I have not been an avid fisherman, but I have been active and very much interested in seeing other people enjoy this relaxing and wonderful sport.

In the last few years strides have been taken beyond my fond hopes, to provide fishing near our town. Suddenly within fifteen minutes of my home, we have Lawrence Baker, Sheppard Dam on the Long Arm Creek, Haldemans Pond and Codorus Park Lake, all well stocked with a balanced variety of fish. I am getting out the rods and reels of my family again.

Very simply, I am trying to say "THANK YOU" for a well planned program.

Raymon J. Dubs, president
Hanover Water Commission
Hanover

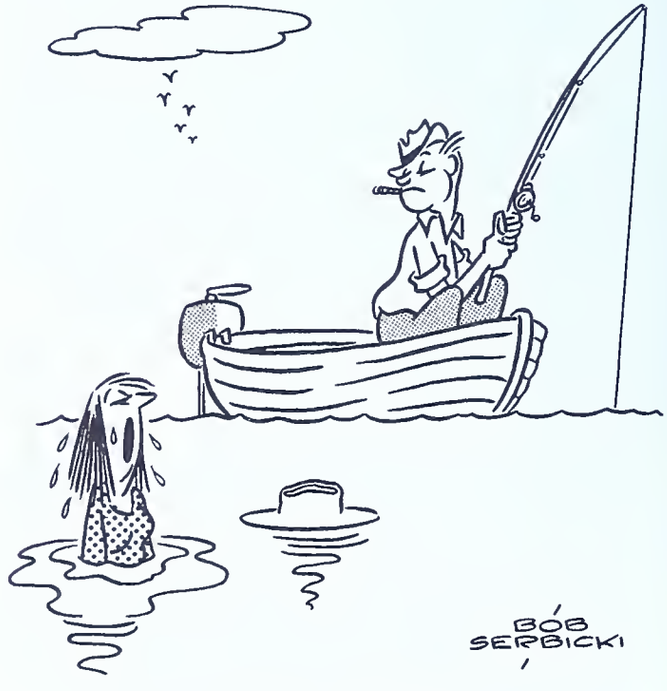
NUMEROUS MUSKIES

Dear Sir:

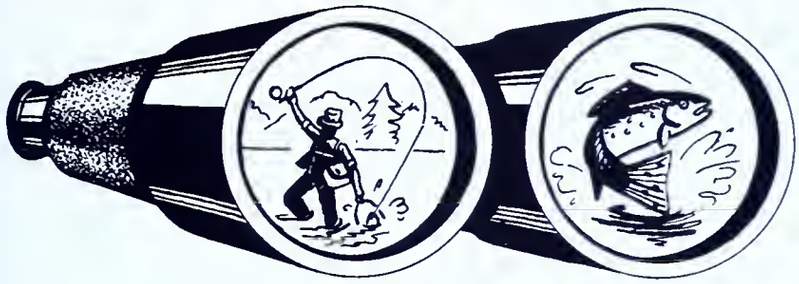
I haven't been doing much musky fishing lately but I got lucky a few weeks ago and would now like to join the Husky Musky Club. This musky was 40½ inches long and weighed 17½ pounds. The fish was taken on a spoon in the Allegheny River near Clinton. I have caught larger muskies in the past, but not since the Husky Musky Club started. This was my 175th musky taken in good old Pennsylvania since 1955. Quite a few I have released. My best day on the Allegheny River produced 6 muskies and a countless number of days showed nothing but a lot of good exercise, sunshine, rain, and plenty of fresh air.

I would like to add (without trying to sound boastful) that I caught over 200 this season (released many of them) and think that fishing in Pennsylvania is mighty hard to beat.

Steve Valencic, Natrona Heights



"GOT A MINUTE?"



FISHING OUTLOOK

By.. Stan Paulakovich

IDEAL OCTOBER

THE SUCCESS OR FAILURE of a fishing trip too often is measured by the amount of fish caught. A recent vacation in which relatively few fish were caught provided one of the finest angling trips I've ever spent. The mosquitoes that seemed to descend each evening just at dusk, the winds that blew continuously from the wrong direction, the periodic rains and the reluctance of the fish to hit couldn't disrupt the warm friendship and companionship that put having fun first and catching fish secondary.

The month of October offers conditions most ideal of any month of the year for fishing. Clear cool days, crisp evenings and nights are slowly lowering water temperatures throughout the state. Fishes as well as other species of life are now preparing for the long winter ahead.

The handiwork of mother nature is evident in every bend of the river or around each point of land. From the stick-out greens of the Pines, Hemlocks and Firs to the varying shades of red, yellow, orange and brown of the deciduous trees, the view of the flaming foliage makes it a pleasure just to be outdoors.

The sight of a flock of Canadian geese overhead, honking their way south and the sudden whoosh of a group of Black Ducks taking off from a hidden cove, add to the excitement of the day. The solemn flight of a Blue Heron, the nervous get-away of a pair of Woodies and the noisy, raucous call of the Little Green Heron you've disturbed seem to say "Stop Bothering Me."

October offers a great variety of fishing throughout the Commonwealth. Trout are still in season in approved lakes, ponds, reservoirs and many streams; largemouth bass, smallmouth bass, and the fighting musky are feeding heavily.

Probably the most sought after fish now is the walleye, and for two good reasons. First, the walleye is a voracious feeder during October and will eat anything it can catch. Secondly, when it comes to table quality the walleye is ranked tops by most anglers.

Although preferring cold, clear, moving water with sand and gravel bottom, the walleye has done well in our larger impoundments throughout the state. Pymatuming Reservoir and Kinzua Lake in western Pennsylvania, Raystown Dam in central Pennsylvania, and Lake Wallenpaupack in the east have excellent walleye fishing accessible to anyone.

Although "prime time" is still early morning and late evening, fishing during the day is usually good. Live bait fishing methods vary over different sections of the state. The Allegheny River favorite is the sand pike or log perch minnow, with helgrammites second. Black sucker minnows rank number one in central Pennsylvania while easterners along the Delaware River prefer lamprey eels as their top choice, for trolling. Spinners like the C.P. Swing or the Mepps, with or without worms attached, have taken many walleye wherever fished.

Probably the most deadly walleye lure is the "jig." Bounced slowly along the bottom, these lead-heads in solid colors, white, yellow or black with the bucktail or marabou tail are killers. Fished in the deeper holes of the river especially around old abutments or bridge piers and in lakes in 15 to 20 foot depths with rocky bottoms will put walleyes on the stringer. Anglers statewide agree on one thing in walleye fishing and that is "work your lure slowly."

During October treat yourself to some walleye fishing. Select one of the many areas throughout the state and with a supply of jigs, spinners or bait enjoy some fine fall fishing.

EXTENDED SEASON—

Fishermen interested in knowing what streams are open to trout fishing under the "extended season" regulation may request a list of the streams (along with special regulations) by writing:

Extended Season
Conservation/Education Division
Pennsylvania Fish Commission
Box 1673
Harrisburg, Pennsylvania 17120



"LET'S GET GOING . . . LOOKS LIKE THEY'RE HITTING TODAY!"



AS TWILIGHT fades into darkness, glow worms become active. They are among the best baits for night fishing.

IF YOU'RE AN AFTER-DARK FISHERMAN THEN PERHAPS YOU SHOULD TRY SOME OF THOSE . . .

GLOW WORM BAITS

by DON SHINER

EVER USE GLOW WORMS as bait to catch trout, bass and maybe walleyes and panfish? I mean *live worms* that glow like neon signs at night? There are insects of this type in Pennsylvania, though they are not so plentiful as, say, grasshoppers. But they are there in moist grass and leaves, and often on damp banks beside streams. Put one or several luminous worms on your hook and it's like offering honey to bears. There's almost instant action! But if you can't locate live glow bugs, you can use several new luminescent plastic baits now on the market and net about the same results.

I encountered live glow worms numerous times along banks of several upstate trout streams. The first incident took place one evening on Big Fishing Creek located in Columbia County. After an afternoon shower dampened the landscape, I decided to have a go at trout. I caught several small ones. As the evening wore on and twilight faded, I spied two luminescent marks on the bank beside me as I knelt on shore to change fly patterns. On close inspection, I found the marks to be worms, of some type that gave off visible light, much as fireflies do, only difference being that the luminescence of these worms remained at a constant intensity. I experimentally tossed them into the stream. They were promptly seized by trout. Thinking that I found a good bait, I searched the stream bank for more glow worms. There were no more to be had.

On another occasion, while fishing a tributary stream, I found more glow worms. There were four of them in all, resting on small pieces of limbs partly imbedded in soft mud. This time I knew exactly what to do. I impaled all four, one at a time, on my hook and drifted them through the deep riffle in front of me. I creeled four trout in less time then it takes to pump a tankful of gas in the old jalopy! I searched the bank for more glow worms, but again, I found no more.

On a third occasion I found glow worms one evening beside the moist edges of a farm pond where we had gone to catch frogs. Though we had no tackle along, I tossed several of the worms into the pond. Bass, beneath nearby lily pads, tore into action!

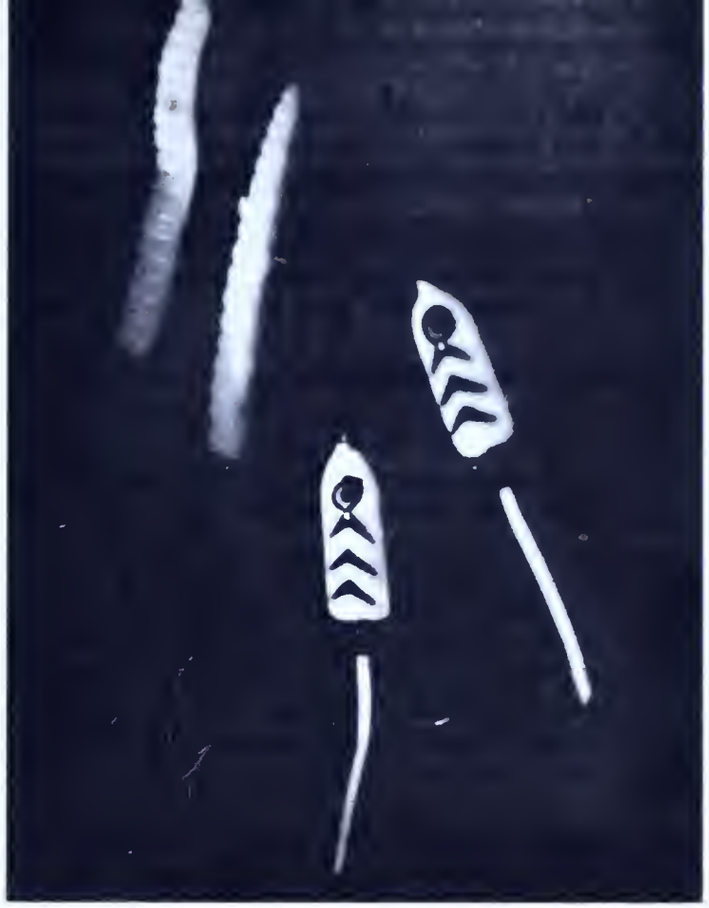
Obviously glow worms are effective baits for a variety of fish, if—and the if is a big one—you can find them in sufficient quantity. But they are not plentiful.

One hears very little, if anything, about this bait. Mention glow worms to most individuals, short of entomologists, and they are at a loss to know what you mean. In fact, even most reference books are sketchy on the topic of luminous insects and bio-luminescence.

This field has not been vigorously pursued in the past by scholars, though a professor at a nearby State College related to me that more biologists on the graduate level are giving their attention to bio-luminescence in nature, particularly for their master and doctoral thesis.

One source, among numerous references, gave an account on light-producing organisms. It mentioned that while the sun and stars are ordinarily considered the sole sources of light, some plants and animals themselves radiate this energy. In fact, luminescence, or light production, is quite an extensive phenomenon in nature. Many organisms produce chemical substances that in turn produce light perceived by the human eye, and some light waves too of such length as to be imperceptible to man.

There are, for example, many luminous animals in the ocean. These include phyla such as protozoans, jellyfishes, corals, squids, starfishes and the like. Sharks are sometimes luminous on the underside due to the presence of many small light-producing organisms which attach themselves



LUMINESCENT BAITS are easily seen at night.

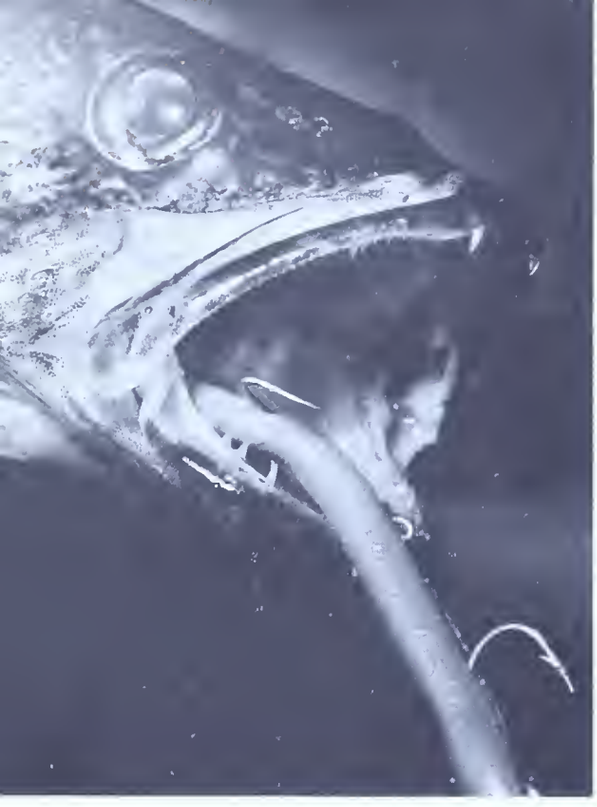
to the skin. While the ocean appears rich in luminous forms, none appear in fresh water, though there are many luminous organisms on land, the more common being some fungi, beetles, fireflies, "glow worms" and at times some earthworms.

Another authoritative source mentioned a common and spectacular luminescent organism known as the "click beetle," *Pyrophorus* (family Elaterideae) which is found in some southern states and in both Central and South America. The thorax of this insect emits a brilliant amber-

continued on next page

FISHERMEN WHO HAVEN'T tried night fishing should give it a try. Often that's when the big ones feed.





continued from previous page

GLOW WORM BAITS

LARGE PLASTIC dew worms, of the luminous variety, catch walleyes at night and during the day in deep waters.

colored light on dark, damp nights. Another insect, found in Paraguay, and called the Paraguay beetle, looks something like a railroad signal because it emits red light at both anterior and posterior end, and green light in the thorax in between—about as odd an insect as found anywhere in the world.

The glow worms which I found on those numerous occasions in all probability are females of some specie of fireflies. They hatch from eggs and remain wingless, maturing as larvae in form and producing light primarily as a means of attracting mates. Several sources refer to these as "glow worms," and they perhaps form the basis of the song "The Glow Worm" that was popular quite a number of years ago.

The production of light in insects is not completely understood, but it is currently being investigated by several noted scientists. It is thought to be associated with oxidation and brought about by enzymatic action on protein substances in the presence of oxygen.

The whole point in mentioning this is to show that luminous insects are not foreign to fish. When available, they may form a part of the diet of those fish which remain active at night—big browns, bass and perhaps walleyes too.

If glow worms were more plentiful, fishermen would be hard put to find better baits. But, alas, they are not, or so my findings would indicate. Fishermen do well to find even a few when climatic conditions are right.

But this is no drawback. I've found, during the past year or two, that one does not need to rely on the chance finding of a glow worm or two in order to use luminescent baits. There are now numerous luminous baits on the market that do almost as well. There are, for example, the soft plastic baits molded to imitate large dew worms. One firm, namely DeLong Lures Inc., 85 Compark Road, Centerville, Ohio, currently adds phosphorescent chemicals to their soft plastic dew worms. When activated with light from a flashlight or headlight of a car, the plastic worms give off a soft, subdued light. These artificial "glow worms" are effective when trolling in deep water for walleyes. The luminous worms are apparently more visible and at greater distances in dark water than are ordinary plastic worm baits. They are also effective for trout at night when cut into smaller sizes or portions.

There are two other luminous plastic baits on the market that do a pretty good job of imitating the live glow worms. One is the "firebug" manufactured by Phillips Fly & Tackle Co. of Alexandria, Pa. Another is a small two-inch long plastic worm made by Ernie Davis of Davis' Tackle Shop, R.D. 1, Bloomsburg, Pa. Both of these baits begin to approach the size and luminous color of the live glow worms which I've encountered. Both are effective for trout and fallfish, including bass, at twilight, night and in dense shade during the day.

The Phillips' "firebug" is basically a streamer fly with a glow-by-night plastic body and phosphorescent strip of flexible plastic tied in among the long tail feathers. The small hard plastic body and long feather tail give a good representation of a minnow during the day. After dark, when activated with light, the body gives a ghostly glow of light not unlike that of a glow worm.

The glow-bait, made by Ernie Davis in his sport shop, is a scaled-down model of the larger soft plastic dew worm. It is about two-inches in length, molded over a long shank, gold plated hook. The yellow to cream colored plastic worm appears in daylight to be a larvae that bores into rotting trees and wood and matures into one of the varieties of June bugs or "pinching" beetles. At night, when activated with light, they glow much like real glow worms. The Davis glow-baits are effective day or night on the trout stream.

Doubtlessly there are other plastic baits that resemble and glow like live glow worms. They're probably effective too for a variety of fresh and salt water fish. With several of these tucked into a pocket box, the fisherman does not need to rely on the chance finding of a few glow worms on the stream bank to experience exciting night fishing.

It is intriguing to fish at night as most who have tried it will agree. As the blackness of night moves in to obscure the stream, the sense of hearing and feeling takes over for sight. It is then that fireflies flash their Morse-code in weeds along shore, and glow worms put on their brightest glow. And there are moments, such as when fish splash on the surface, that raise the hackles on your neck. Once the fever of night fishing takes hold, it's hard to shake it loose.

Fishing with glow worms at night also give the fisherman the advantage of knowing where his cast splashes down in the ink-blackness. And there are times when he can observe the glowing lure as it progresses on its drift downstream. It is exciting to have the glowing-light extinguished as it disappears between jaws of an arm-long trout.

WATERWAY SAFETY—

THE ACCIDENT REPORTS



EACH YEAR collisions occur on Pennsylvania's waterways when operators fail to watch where they are headed. If that power boat doesn't hit the overloaded canoe it may well swamp it.

by ED JONES, Chief Marine Educational Specialist
Pennsylvania Fish Commission

MOST PEOPLE FIND STATISTICS dry and boring, but if you operate a boat in Pennsylvania it might pay you to read these statistics and remember them.

In 1968 there were 72 boating accidents in the Commonwealth involving 89 boats. These accidents resulted in 30 deaths. There were also 47 serious injuries and property damage amounting to $19,800. Unfortunately it is very likely that the thirty people who died in boating accidents last year need not have lost their lives if they had followed the safety precautions preached year in and year out by the Coast Guard, Coast Guard Auxiliary, Power Squadrons, Pennsylvania Fish Commission, and the other agencies and groups offering instruction and advice to the boating public.

In Pennsylvania 86% of the fatalities occurred on non-tidal waters. Many occurred on quiet little bodies of water of only a few acres in size, in very peaceful surroundings. Forty-three percent of the fatalities were between the ages of 25 years and 50 years—with from 100 hours to 500 hours experience in boating. This would indicate that most of the fatalities were not beginners but people who had quite a lot of experience.

The type of boats most frequently involved were constructed of aluminum, 43%, 59% were of open construction, 64% were less than 16-feet in length, and 66% were powered by an outboard motor. In 33% of these fatalities the power of the motor was less than 10 horsepower.

There were many causes but the greatest two were "overloading and improper loading." These two actions caused 30% of boating fatalities. Many accidents occurred when people stood up in small boats while fishing, or leaned too far over the side while bringing in a catch. I think it is safe to say that most of these people either overestimated their own abilities or of those of their boat. Many underestimated the state of the weather or the body of water in which they were boating.

The greatest amount of fatalities occurred in the month of March (37%). Many of these fatalities, I'm sure, were caused by the low water temperature. An article in the April Angler of this year corners this fact pretty clearly so I won't go into it here. But try to remember that the time of year had a great deal to do with the overall fatalities in the state.

I feel that a great percentage of these fatalities occurred because of the resistance boaters have of wearing life saving devices while boating. What their reasons are for this resistance no one really knows, but I think the biggest two reasons are that (1) the boaters feel that by wearing a life jacket he might appear as a greenhorn or as a "sissy" or (2) he feels that "it just couldn't happen to me!"

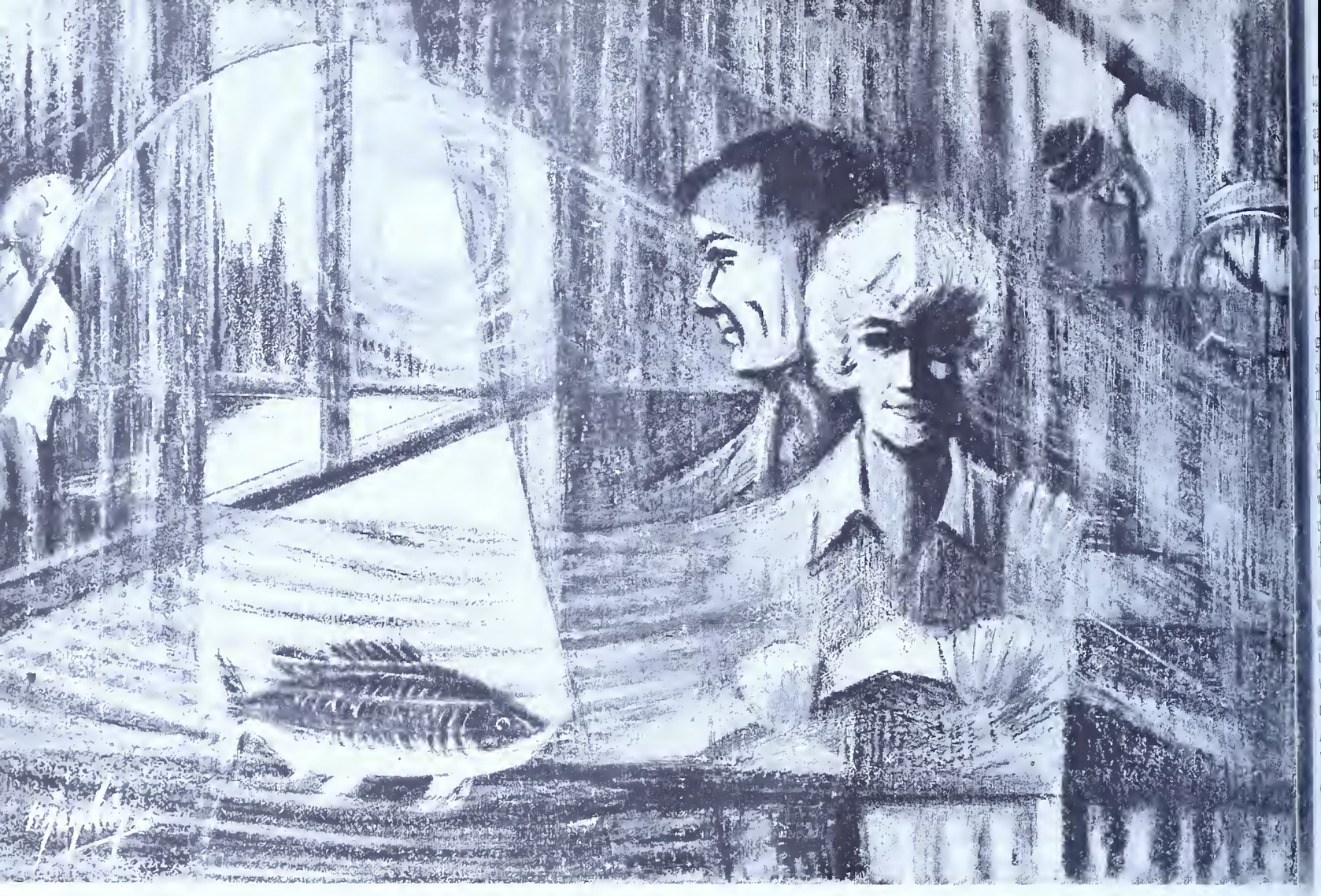
The fact still remains that most of these people would be here today, with their families and friends if they had just taken a minute of their time to don a life jacket and use more "BOATING SENSE."

Please follow the advice of the Pennsylvania Fish Commission—enroll in one of the many safe boating courses offered throughout the Commonwealth. These are given by the Coast Guard Auxiliary, The Power Squadrons and the Pennsylvania Fish Commission. The Pennsylvania Fish Commission offers a short six hour course that will not make a better sailor out of you, but will put you on the water legally and safer than you probably are now. If you are interested in our Safe Boating course, contact any of our Waterways Patrolmen or write to the Pennsylvania Fish Commission in care of Watercraft Safety Division.



WATERSKIERS probably travel thousands of miles each year while enjoying their sport and while they frequently fall they still aren't involved in as many fatalities as the people who use smaller boats like those shown on the right.





NIGHTS ARE FOR —

by
PAT EISENHART

IF ANYONE WOULD HAVE TOLD ME a few years ago that someday I was going to enjoy night fishing, I would have replied "you really know how to hurt a gal." Nothing is more inviting than my bed and midnight is the time to be in it, not fishing. My sense of touch, sight and hearing are not too acute after 9 P.M. and how I was ever talked into it I'll never understand. My first few experiences were in boats and I inevitably froze. I don't understand why as we are perpetual motion fishermen. We cast, retrieve and row to a new spot. It's a continual contest to see who will get the first strike or land the first fish. Poor fishing doesn't bother me but I'm frequently reminded that I could use the casting practice. That's what comes from being married to a perfectionist. They say that opposites attract but in our case it's ridiculous. I'm an inferior, introverted, paranoic, nonconformist and being female with moods and mannerisms to match the sex, it spells imperfectionist.

To deviate slightly from the original tale, let me tell you about our tackle box. It's beautiful! How many men can describe their's so eloquently? It shines so bright my reflection glistens and echoes back. When open it's a treasure chest. Each layer contains it's own special lures, spinners, go deepers, surface plugs, jigs, etc. Heaven help anyone who disarrays them (usually me). Why put the plug back in the box and close the lid if I might use it again sometime on the next trip? Why is it so imperative that I close the tackle box? Anyone with two eyes could see that it's open so why should he get aggravated if he was dumb enough

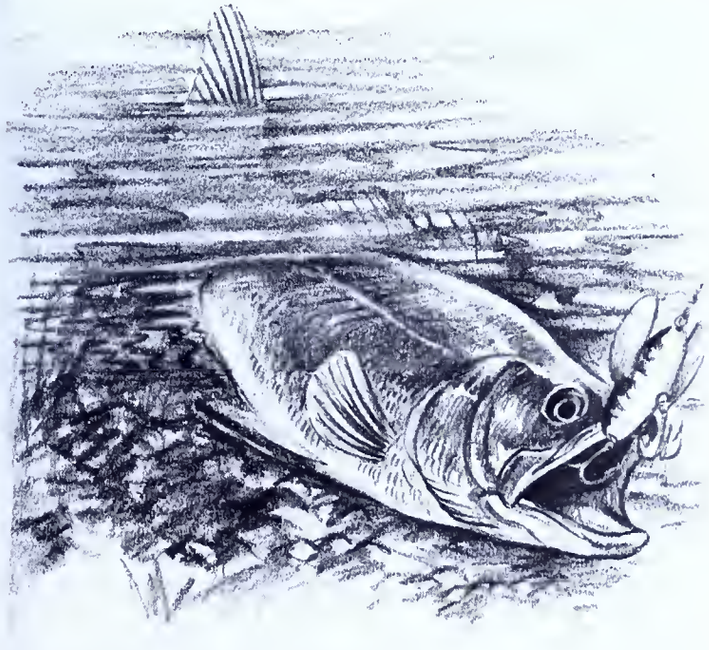
to step back and upset it. My ears burn and my face redden when I ponder the things he said. (Jim can become agitated over such minor things and then his vocabulary becomes interspersed with words that wouldn't pass a Hollywood censor). I feel that even the best people make mistakes.

But back to night fishing. About two years ago, the first night of bass season we went to a local hot spot in our county. Neither Jim nor I had been there since we were children and we had been hearing that the fishing was great. About midnight I was fishing a Rebel lure with no success and decided to switch to a Crazy Crawler. About my second cast the fish struck and when I heard the size (it splashed hard) I was overjoyed. Now all I had to do was land it in the dark, but land it I did—twenty-one inches of bass. A new sport was born for me. After that we went night fishing ever opportunity we had. I never caught another one that size but I had been convinced that night is when the big ones prowl.

The only trouble with this kind of fishing is that we often wade the water. My boots reach only to my knees and so with an encouraging "Come on Honey, the water isn't deep" from Jim I usually find the water reaches my waist. This year he suggested that since I was making so much money writing lies (I think he was referring to my Angler contributions) I should invest in a pair of waders. When I asked their price range and was told the cheap ones cost about fifteen dollars, I figured the water won't hurt me for awhile yet.

It's like our fishing licenses. I always buy his for our February wedding anniversary figuring he will retaliate with mine for Mother's Day. I realize that fishing for trout has already begun but it's too cold before May for me. Anyhow I wait until the day before the opening of bass season and then go buy my own. When I've told Jim that I've bought my license he will reply like a record, "Gee Honey, why didn't you wait, I wanted to buy it for you." Now I can never figure out if he's being cute or sly as this has been going on for years.

Then there's the matter of gifts. What woman truly appreciates a seven foot spinning rod for her birthday? I find I can't make myself ecstatic over a fly reel with line to match at Christmas especially when they happen to be the ones he has been eying for months. It's not that I don't appreciate such gifts but I'd like them more on special occasions, like the anniversary of the day Isaac Walton tied his first Royal Coachman. Back to night fishing.



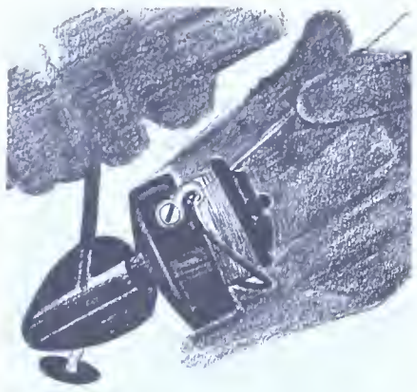
One night we went fishing and the next day I was scolding Jim for leaving me alone to fish while he went off elsewhere. I asked him how he'd feel if someone came and walked off with me. I wasn't really frightened (I love the quiet and solitude) but I felt he needed to be chastized for his negligence. The children were listening and one asked if I was scared by myself? Jim laughed loudly and replied "Why should she be? With the amount of clothes she wears she looks like two men." I thought the remark was highly uncalled for. Granted I'm no beauty queen but a true fisherman would understand. Warmth is more important than appearance. Right, fellas?

Then too, how can I look glamorous when I'm the litter bag. Every candy wrapper or cupcake paper goes in my pockets. I don't mean to get on a soap box but isn't it a shame how, we, the fishermen keep our streams and lakes? Bet everyone is thinking "not me." Does anyone remember as many soda and beer bottles lying around when a deposit was required on them? Why leave your garbage lying on a shore line, the culprit certainly wouldn't deposit his trash in his living room. Enough complaints.

A few weeks ago we decided to try Locust Lake. Jim thought I should scout the area as to twigs, depth, and stumps in the event we'd try it at night, I wouldn't always be hung up. I didn't take any boots but hopped from rock to rock to get near the water. I'd taken my fishing rod and on the second cast the fish struck my black jitterbug. He began giving a good fight and I was twice as determined to land him after two guys remarked to each other "She'll never land that fish. Look at all those stumps." I jumped from the rock I was standing on, forgetting about the mire when suddenly I'm ankle deep in mud. But it was worth it to land an eighteen inch bass between two men fishing. They smiled and said "atta girl" but I'll not forget their lack of confidence in my fishing ability. When I showed Jim my fish he beamed proudly but told me from now on I would have to dream up the material for my stories. He wasn't going to provide me with any other opportunity to show him up. I said "Come on now, don't be condescending. You still think you're the best fisherman around. Besides, I'm only trying to emulate you." Whereby he replied, "that's the trouble with you and those °#?&° ten dollar words, I never know if what you're saying is good or bad."

I have a system for fishing at night. I cast my plug, reel in slack line, let the plug sit until I count to thirty-three (that's how old I am) reel twice (one turn for Jim and one for me) count to sixteen (that's one half of how old I am) hop the plug (the hop is extra) reel twice and count to thirty-three etc. Now, by the time I'm fifty, according to my calculations, the fish better strike while the plug is sitting because it sure won't be moving much. If

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NIGHTS ARE FOR —

this system doesn't get me any results I just politely switch plugs with Jim as he always seems to do better than me. The only trouble is he does just as well with my discarded plug.

What I'm going to tell you now hurts but Jim bet I wouldn't have the courage to tell anyone about it. We were night fishing the breast of a dam and after making a long cast I discovered I had a bird's nest big enough for an eagle to hatch eggs in. I tried unsnarling it in the dark with no luck and decided to head for Jim who had the light. Now I'm trailing my jitterbug behind me and walking along until I came to the light. As soon as I stopped a fish hit the plug. I quickly set the hook and began to reel while the fish kept coming at me until I brought him to the tip of my rod whereby it jumped and was promptly gone. You should have heard Jim. "You call yourself a fisherman. Ha, ha. Don't ever say I taught you that. Bet that's one fish the readers of the Angler will never read about."

You'll notice I rarely mention what Jim catches. If I told you, you wouldn't believe me anyhow. Whenever I show friends his fish they invariably remark "Come on Pat, we know who catches the big ones in your family." I deny this frequently but it's not my fault no one will take my word for it. Believe me, HE IS A GOOD FISHERMAN. He has to be or I wouldn't go with him. A person is judged by the company she keeps.

With that note I'll end the tale but advise you wholeheartedly to try night fishing. You may not have any luck but you'll sure have plenty of fun.

COMING - - -

Allegheny Muskies

Fishermen who enjoy catching Pennsylvania's largest fish—the Muskellunge—should find a coming story about fishing for muskies on the Allegheny River interesting. It's written by a highly respected muskie fisherman of northwestern Pennsylvania—Howard Levy of Titusville. It's featured in the coming November issue.

Extended Season

Trout fishermen still have October to pursue their sport on many streams and lakes throughout the Commonwealth. A list of streams still open is available (see page 5), but anglers should remember the season closes October 31.

Fly Tying Feature

Tighten your vises! Beginning with the November issue of the Angler fly tyers will find the first of another series of patterns prepared by Chauncy K. Lively whose fly tying series graced our pages last winter.

Valuable Roots

Wild ginseng was a big source of income for a lot of folks many years ago and, while you probably won't find much anymore, you may find a story about it interesting—it's called "Most Valuable Root," was written by Wilbert N. Savage, and it will appear in the November issue of the Angler!



the PERCA

COHO FISHERMEN ON LAKE ERIE this fall may see plenty of this trim vessel as they pursue Pennsylvania's newest sportfish. It's the 49-foot Perca, largest boat operated by the Pennsylvania Fish Commission.

Piloted by Howard Wilson, a former commercial fisherman at Erie, the Perca is assigned to research duties on the big lake with a special assignment at this time of year. Wilson and his crew will be trying to keep track of just where the coho are in the lake. Plans call for relaying information to news media so fishermen can be told where to head for the action.

Wilson says the Perca, while not the largest research vessel on the lake, is among the most versatile and well equipped. It is outfitted for both trawling and gill netting and carries a host of electronic gear for research purposes including a highly sensitive Simrad depth recorder which it is hoped may help "show" the crew schools of coho.



HOWARD WILSON, captain of the Perca (above) checks Simrad depth recorder aboard the 200 horsepower diesel-powered Perca (right). The 49-foot vessel is being used in an attempt to keep track of coho in Lake Erie as well as for research work.



TRAWLING EQUIPMENT shows at stern of Perca (above). Gill nets are worked from the port side along open cabin. Wilson's son Daniel (right) is also a Pennsylvania Fish Commission employee and serves aboard the boat.

photos by BILL MILLER



THERE'S MORE TO ANCHORING YOUR BOAT THAN JUST TOSSING A PIECE OF SCRAP IRON TIED TO SOME EXTRA CLOTHESLINE OVERBOARD. HERE ARE SOME BASICS ABOUT . . .

ANCHORS AWEIGH

by
DEAN KLINGER
Chief Marine Services Specialist
Pennsylvania Fish Commission

HEADLINES ARE MADE every time a motor boat is swept over the breast of a dam resulting in death, disappearance or serious injury to any or all passengers. Simple information which could easily prevent all of these accidents never makes front page news and is almost never seen in print. The information I am talking about is how to select and properly use an anchor.

Neither State nor Federal regulations list an anchor and sufficient line as required equipment on board any pleasure boat, however, if an accurate count could be made statistics would probably show that many lives are saved on our waters through the use of anchors each year.

A stalled motor on a boat drifting toward any of our many dams will almost certainly mean tragedy unless the boat can be stopped from drifting or the motor restarted in a hurry.

But like about everything else in the boating game there is quite a selection of different types of anchors with each one having certain advantages as well as disadvantages. A few of the most commonly used ones and the pros and cons are as follows:

MUSHROOM—Very good for use on lakes with stumps and debris on the bottom where there is no strong current. The weight-to-holding power ratio make this an unsuitable anchor for streams with strong currents. Large (50 pounds and up) mushroom anchors are excellent for many types of permanent moorings because their design permits them to bury themselves in a soft bottom.

STOCKLESS (NAVY TYPE)—This is probably the most commonly used anchor on boats under 26 feet in length. It has good holding power for all around use. The greatest disadvantage of this type anchor is its ability to get hung up permanently in tree stumps and rocks.

DONFORTH—Because of its design this type anchor has a better ratio of weight-to-holding power than other anchors. A five to ten pound anchor of this type can very easily hold a boat under 26 feet in length under almost any condition. It is designed with a safety pin making it almost impossible to get hung up permanently. This pin will break when the direction of pull is reversed allowing the anchor to be pulled out backwards. Another advantage of this type anchor is the fact that when not in use it folds flat and takes up very little space.

CEMENT BLOCKS AND RAILROAD TRACKS—Although inexpensive to obtain this type anchor is not



SUSQUEHANNA BOATER Bill Gerhart, lowers a Stockless anchor from his small houseboat. This anchor has plenty of holding power for the size boat on which it is being used.

suitable for small boats because of their weight-to-holding power ratio. Not being designed to dig into the bottom of the stream this type must rely entirely on its weight for holding. This increased weight is dangerous when retrieving from a small boat because of its tendency to capsize the craft.

No matter which type of anchor you choose it will not be satisfactorily efficient unless you have enough line attached and in use. When boating on waters with current and dams it is necessary to carry and use an anchor line which is at least seven times in length as the depth of the water. To properly anchor in 10 feet of water you would need at least 70 feeet of anchor line. By increasing the length of line used the holding power of the anchor is also increased.

Nylon line is extremely desirable for use in anchoring because of its working elasticity of 15% to 25% which is 2 to 4 times that of manila. The shock absorption capabilities on nylon's inherent elasticity relieve the shock loading on both the boat and anchor. For the maximum shock protection use the smallest size line with a sufficient breaking strength factor. One fourth inch nylon line has a breaking strength of 1,800 pounds as compared to 650 pounds breaking strength of manila line to same size in diameter.

Dacron, Polypropolene, and other inelastic lines including Manila should be avoided for anchor lines whenever possible.

Nylon resists most rot and decay and often protects itself from serious chafing by forming its own protective layer of fuzz. However, it should be protected whenever it goes through checks or across sharp edges. A short length (2 feet to 4 feet) of light chain at the anchor end of the line will protect against bottom chafe and at the same time increases the holding power.





MUSHROOM ANCHOR is fine for holding small craft in still body of water. Lael Eggler, wife of Pennsylvania Angler editor Tom Eggler lowers one from small canoe (above). Care should always be taken to "lower" anchors overboard, not just toss them in the water. In picture below Gus Spagnolo, Commander of the Harrisburg River Rescue displays three popular anchors. He's holding Mushroom while Stockless is in foreground and Danforth behind.

The price of nylon line is about four times that of Manila of the same diameter but the increased breaking strength of nylon allows a much smaller diameter line to be used. Considering also that the fact that nylon outlasts Manila in the long run nylon can actually save you money.

If you do decide on nylon line there are also a few other items that must be kept in mind. Knots must be secure as this type of line can slip easily. Usually an extra turn will prevent most knots from loosening themselves; thimbles should be lightly spliced so they do not drop out when the line is stretched; one more trick should be taken in splicing nylon than in Manila; small diameter lines should be stowed out of direct sunlight to prevent fiber damage by ultra violet rays.

BASIC HINTS FOR SAFE ANCHORING

1. **Make sure one end of the anchor line is fastened to the anchor and the other end is fastened to the boat.**
2. **Always lower the anchor slowly—don't throw it overboard.**
3. **Always anchor from the bow—the stern has a tendency to pull under in a storm or in strong current.**
4. **Be sure nobody is standing on top of the anchor line. A foot tangled in the line can be disaster.**
5. **Always anchor outside of a busy area or channel.**





MOST BASS FISHERMEN ARE PROBABLY FAMILIAR WITH THIS POPULAR BASS-CATCHER, BUT IF YOU'RE NOT YOU SHOULD BE.

THE KEYSTONE CRAWDAD

by Thomas Fegely



THE CRAWDAD'S eyes and antennae are located on the end of short stalks for easy movement (above). It swims by rapid downward movements of the flattened tail while the pincers and eight other legs enable it to walk along the stream bottom (left).



CRAYFISH OFTEN BATTLE with each other. The loser is fortunate to escape with only a missing leg or eye since the winner often has the loser for dinner (above left). Females attach their crayfish to the underside of the tail. At this time they are said to be "in berry." About a week later the dark eyes of the young begin to appear (above, center and right).

EVERY FISHERMAN LIKES to sit back occasionally and recall the hot summer days of long ago when, with bamboo pole in one hand and a can of worms in the other, you headed for your favorite hole down by the creek. Sometimes though, they just weren't biting. Then, the pole was leaned against a convenient tree, off came your shoes (if you had any on) and into the cold, clear water you'd wade, being careful not to step on any sharp stones. Turning over a few flat rocks, you could always count on catching a couple of crayfish. Perhaps you called them "crabs," "crawfish" or "crawdads," depending on where you lived.

The crayfish belongs to a group of invertebrate animals called decapod (ten-footed) crustaceans. His relatives include such delicacies as shrimp, crabs and lobsters. In the Mississippi drainage system and in certain areas of the Great Lakes, the crayfish itself is eaten although they are much larger than the type found in Pennsylvania waters.

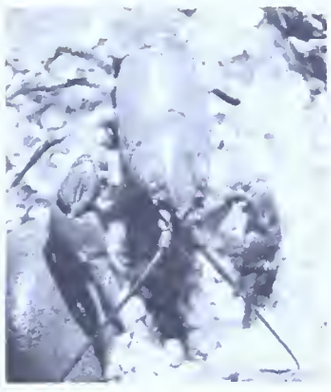
Long antennae, large claws, eyes on the end of stalks and a spined head give the crayfish a formidable appearance. When its watery world is calm and quiet, it crawls backward, forward or sideways across the stream floor. If disturbed, it swims backward rapidly by a vigorous downstroke of the tail. Hiding patiently under flattish stones, the beady-eyed creature waits for a small fish or aquatic insect to pass by. Then, with a quick thrust of the pincer claws, the victim is caught and squeezed to death. Usually, however, the crawdad scavenges the stream or lake floor and pinches bits of food from dead animals or decaying vegetation. Passing the morsel back to its smaller feet, the food is torn into little pieces and crushed by the jaws before being stuffed into the mouth. Crayfish are cannibalistic and often dine on other smaller relatives as the opportunity presents itself. They need not drink water since it is diffused directly into the blood.

The sexes can be recognized easily by the first pair of abdominal appendages. In the male they are hooked, in the female they are not. Mating takes place from spring to fall. The male deposits a packet of sperm in a special pocket on the underside of the female. Several weeks later she thoroughly cleans her abdominal appendages, or "swimmerets," and secretes a sticky substance over them. Into this the stored sperm and the eggs are released and here fertilization takes place. A single female may produce from a dozen to several hundred tiny eggs which all remain attached to her underside. When this occurs the female is said to be "in berry" since the eggs resemble small berries. By rhythmic movements of the swimmerets the eggs are kept well aerated. In about two weeks they hatch into baby crayfish which leave after the second or third molt. In photographing a female crayfish with young attached, I've noticed that a few were disengaged when the female flipped her tail downward to escape my grasp as I reached into the small aquarium. Upon later examination I noted that the young crayfish crawled back onto the female as she rested nearby. In open water, however, it is unlikely that the small crawdads would return to the female. They would either be washed away by the swift current or gobbled up by a small fish.

As the crayfish grows, its outer hard covering becomes too small and it must be cast off. Before the "molting" a new outer skeleton has already been formed, although it is much softer than the old one. During this time the crayfish is especially vulnerable since it cannot pinch and does not have the benefit of its hard covering.

Immediately after molting, the crayfish rarely ventures from beneath its protective rock. At the basal section of

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CRAWDAD

each front antenna is a small water-filled sac containing sensory hairs, among which are fine sand grains placed there by the crayfish. Any movement causes the sand grains to roll over the hairs, thereby serving as an organ of balance similar to the semi-circular canals of humans. After molting, these grains of sand are lost and the crayfish also temporarily loses its sense of equilibrium. A college professor once substituted iron filings for sand in an aquarium containing a crayfish that had recently molted. The crayfish picked up the iron filings and maneuvered them into the sac. When a powerful electromagnet was held above the animal it turned over on its back, apparently due to the filings stimulating the sensory hairs which the magnet attracted to the upper portion of the sac.

The crayfish also possesses thousands of fine bristles all over its antennae, body and appendages. Some are sensitive to touch and others to chemicals, thereby enabling a crayfish to detect its surroundings in the dark. Its nocturnal habits also may be due to its light sensitive eyes, especially fitted for darkness. Each eye is made up of thousands of individual lenses, as opposed to the single lens of our eye, adapted to detect the slightest movement of prey or enemy. Images are probably viewed as a mosaic pattern.

The life span of a crayfish is relatively long considering its size and environment. Males generally die at the end of the second summer while females succumb at the beginning of the third summer. Few, however, die a natural death since they are an important link in the aquatic food chain being fed upon by raccoons, fish, wading birds and turtles. Others are used as bait for trout, bass, catfish and a variety of panfish.

Tops as Bass Bait

In its soft-shelled stage directly after molting, this small crustacean is an excellent bait for smallmouth and largemouth bass. During this stage however, the crayfish is vulnerable and knows it, seldom venturing from its rocky fortress. This makes the soft-shelled ones especially difficult to catch.

An alternative is to catch smaller, hard-shelled ones, up to two inches long. Bass will hit these smaller ones in their hard-shelled phase but tend to pass up the bigger ones. It should be hooked from underneath through one or two segments of the tail. A size 4 hook is best for smallmouths. Size 2 should be used for largemouths.

Since the natural habitat of the crawfish is on the bottom, that's the best place to fish them. Care must be taken not to let the small crustacean crawl under a rock or tangle the line in bottom litter.

Fishing with crawdads is best done with a fly rod although a light spinning rig will also serve the purpose. Sinkers and bobbers are not recommended since the crayfish should only have enough line to reach the bottom. On a strike the bass must be allowed to run the bait, then hooked a few seconds after the line stops.

The tails of large hard-shelled crayfish may be detached and used for catfish or as bait for other bottom-feeding species.

Collecting and Keeping

If sections of the crayfish are to be used as bait, the portions desired can be easily stored in a freezer. On the other hand, catching and keeping a live supply is not quite as easy.

Crayfish are most easily caught in the ripple area of a stream. Anchoring a minnow sieve across a riffle section and then stirring up the rocks directly upstream may dislodge quite a few in a short time. The desirable small ones are washed into the sieve and the larger ones swim backwards into the net.

Since crayfish are nocturnal, a night expedition to a nearby stream may prove more beneficial. A flashlight, a small fish net similar to those used in capturing tropical fish and a storage vessel is all that is needed. Upon turning over rocks and flat stones, the eyes of the crayfish reflect light and it is a simple matter to net them. A tin can with one end removed and holes punched in the other end is a satisfactory substitute if a net is not readily available.

Bring 'Em Back Alive

Small quantities of crawdads may be kept alive in a container with plenty of wet moss, leaves, grass or the like. The top of the container should be covered with a heavy wet cloth or saturated newspaper to prevent evaporation and provide extra cooling. Every few days a little fresh water should be added. Crayfish cannot be kept in water-filled containers unless an aquarium pump is used to replenish the oxygen used by the crayfish. Crowding too many into one bucket or tub results in cannibalism and the valuable small ones will be lost.

Soft-shelled specimens should be used first since there is no way to keep the shell from hardening. Refrigerating them, however, tends to retard the outer shell's development for a short time.

Bait buckets must be arranged the same as the storage vessel. A few ice cubes beneath the packing material serves to keep the bait cool and lively during hot summer days.

No Relation to Fish

The name crayfish originated from the Old French and then British "crevisse." The evolution of speech caused the people of England to translate the word "visse" to mean fish. Hence the modification to crayfish. Despite its misleading name, this miniature lobster is a member of the same group of invertebrates as the spiders and insects and is not even remotely related to any of its finny neighbors.

MODERN CAMPING

by DEL & LOIS KERR

TENTS

CAMPING TODAY RUNS THE GAMUT from sleeping out under the stars with only a simple plastic tarp rain-shield to an ultra-luxurious home on wheels retailing for $125,000. There's a type of shelter to please any personality or pocketbook.

Tents, of course, were the earliest heralds of the camping craze sweeping the country. Inveterate tent campers, like ourselves, still feel this is the only way to really camp. Styles and types of materials have been revolutionized over the last decade or so. Set-up time on most models has been decreased to ten minutes or less with pop-up fiberglass or snap-together aluminum frames.

A wide variety of style and shapes are now available. Sewn-in floors and screened windows and doors with storm flaps that zipper from the inside keep the tent dry but well ventilated.

New blends of materials plus modern improvements in dry chemicals used for water repellancy make the tents lightweight and easy to handle.

For the back packer or boat camper, nylon tents prepared specifically for ultra-lightweight camping are an ideal choice. A tent large enough for three adults or two adults and two children can be carried in a waterproof bag or a backpack. Total weight including aluminum pole sections which slide together, is only about seven pounds and the cost approximately $125. Similar models for one and two persons are available also.

Probably still the most popular styles are the umbrella and the cabin. Both come in a variety of sizes with different features available from various manufacturers. Modern day umbrella tents have eliminated the center pole, replacing it with an outside corner frame of aluminum. This provides much more floor space for arrangement of cots and/or sleeping bags as well as additional headroom space. Variations of the traditional umbrella style provide extra wings on one, two or all three sides increasing space and providing privacy.

Cabin or wall style tents also have aluminum frames eliminating the need for guy ropes so necessary in old-time models. Rectangular floor space with a consistently high ceiling permits easy arrangement of cots and use of the new double and triple decker cots if the group is large.

Other popular models offer a molded fiberglass frame that pops up into a round igloo-shaped tent or a lengthened version which resembles an old Conestoga wagon. A good tent can be purchased for from $50 to $250 depending on individual tastes.

Or you can have the "outdoorsy" feel of a canvas shelter and the mobility of a wheeled vehicle with luxury built-in features by purchasing a tent trailer. These fold flat, like a utility trailer, for towing ease, but quickly open at the campsite into a large tent with built-in "off-the-ground" beds. Economy models have only one bed and an on-the-ground tent on the other side. They retail for approximately $500.

From here you can go progressively more deluxe by the addition of built-in conveniences such as sinks, three-burner gas ranges, ice boxes and dinette tables which convert into additional sleeping space for the larger family. Prices for the most expensive models run in the neighborhood of $1500 to $1700.

Continually growing in popularity are the self-contained travel trailers which resemble a small motel on wheels. You can get these in sizes to 25 feet or so, and prices ranging from approximately $1,200 to $10,000 or more depending on your individual taste. Larger models, of course, have all the comforts of home. You will need a very heavy car to tow the larger models, but a standard V-8 model will pull the average size trailer.

Truck owners can purchase, relatively inexpensively, a pick-up unit which can be installed in the truck bed. The unit has greater mobility than the trailer and passengers can ride in the rear while the vehicle is in motion.

Most models sleep four to six campers. Kitchen facilities are usually installed. These units can be removed so that the truck can be used for other purposes when the owner is not camping. Larger models can be permanently mounted to a truck chassis.

The ultimate in luxury is the motor home, perhaps the fastest growing of all recreational vehicles. Sales have zoomed from a few thousand only a few years ago to 50,000 in 1969.

These have available just about any feature you would wish to have in a home on wheels. Such vehicles are considered easier to drive than a car towing a trailer. They are particularly appealing to those who travel a great deal and require deluxe facilities similar to a motel. Prices range from a low of perhaps $7000 to a high of $125,000. Sizes vary from the size of a small trailer to bus length.

Motor homes have gained tremendous popularity in the last few years, but this is not an entirely new concept. Actually the first motor home was built in 1908. A wealthy Canadian had a camper body, resembling an old Pullman car built on a Packard truck bed. Motor homes never really caught on, however, until just recently. Increased leisure time and higher incomes are likely the reason.

A visit to a sporting goods show or to any well-filled campground should serve to acquaint the beginning camper with a wide variety of homes away from home. Campers, the friendliest people in the world, will be only too happy to tell you why they feel their type of camping gear is the best and perhaps even to take you on a guided tour of their facilities.



BURDOCK BURS are armed with sturdy hooks that thumb a ride on passing visitors to the fields.

by
Carsten
Ahrens

AFIELD / in fall

So many things go on in autumn, nature's wrap-up-time of the year, that you should get on your walking shoes. A stroll almost anywhere will bring your clothing in contact with certain seeds, and you'll be very conscious of seed dispersal, that very efficient plan of nature to avoid the crowding together of any one species of plants. Tick trefoil, boot-jacks, cockleburs, stick-tights, and beggar ticks thumb rides on hair, fur, wool, or trousers of any mammals that pass. A cow's tail can become so heavy and matted with a variety of these adhesive brownies that the fly-switching appendage cannot fulfill its ordinary function!

Other plants equip their seeds with puffs (thistles, milkweeds), or parachutes (dandelions) that silver the autumn air. Some (lotuses) have their extremely hard shelled seeds in a tough container that can float. Many seeds (apple or hazelnut) are enclosed in tasty fruit or shells that animals find so tempting that they carry these delicacies away to eat in private or to stash away for future meals. A few (touch-me-not, witch hazel) have mechanical devices to eject the seed suddenly away from the parent plant.

. . . that itch to travel . . .

While the seeds are flying, many birds are waiting some mysterious summons to migrate to the ancestral wintering grounds off to the south. Each species has its Shangra La: chimney swifts head for Peru; golden plovers to the poleward reaches of South America. Unlike their long awaited spring returning, their fall migration sort of slips up on me. The bands of grackles, redwing blackbirds, mourning doves, martins and the other swallows slowly increase in numbers, dotting the lawn, filling the trees, or lining the telly wires; then, one day they're gone.

Quite as dramatic, if you can anticipate them, is the passing through, the silent migration, of the black-and-red monarch butterflies, and the big dragonflies known as the "green darners" or to science as Anax *junius*. On September 23, 1967 and on September 26, 1968, I was at my camp when for several hours the sky as far as I could see, up and around me, was agleam with the glassy wings of these handsome "snakefeeders," "devil's darning needles," "mosquito hawks," or whatever you call them. They were on their way from Canada to no one seems to know where. I wished for a helicopter, plenty of gasoline, and time, so that I could gypsy along with them and learn their destination.

. . . the stay-at-homes work, too . . .

For animals that don't migrate, autumn is also a busy time. The ground hog eats himself into a waddling mass before retiring for his marathon winter nap. One, last fall, discovering that paper was a good insulator, made many trips to my trash barrel and dragged big balls of crumpled up newspaper to his den. The strong wind gave the illusion that the "chuck" was semi-sailing.

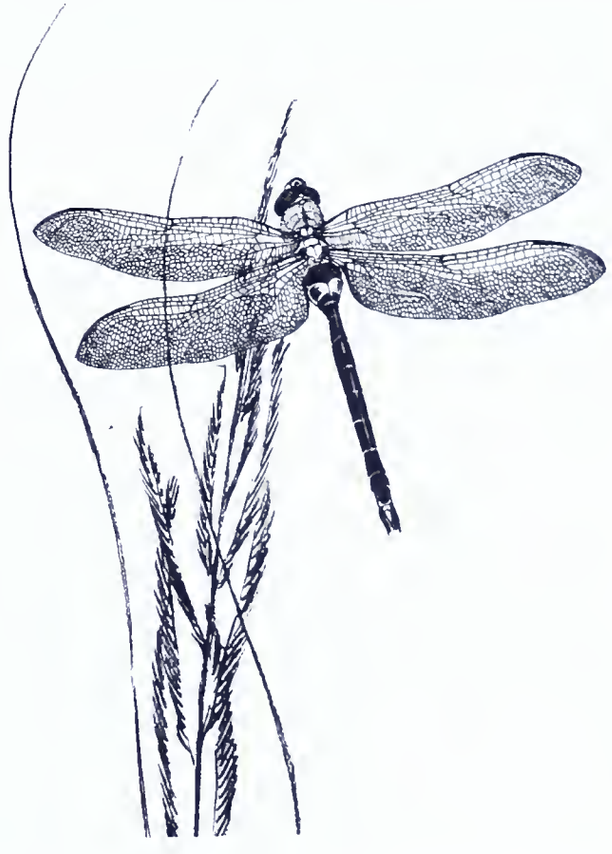
The fox squirrels are all business in the shagbarks. Up there, they pick the hickory nuts, remove and drop the four pieces of the shell, then carry the white nut to a tree cavity or bury it shallowly near by. Muskrats are busy washing and storing corms and bulbs of water plants and,



THE WITCH HAZEL (above) is unique in that its blossoms appear after frosts kill other flowers. A built-in device shoots the seeds away from the parent plant.

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THE COMMON DRAGONFLY, first to appear in the spring and last to be seen in the fall, is one of the few insects that migrate.



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AFIELD IN FALL

occasionally, corn-on-the-cob. Other rodents: mice, chipmunks, gophers, and beavers, find storage space in lodge or den while food is abundant. Those bats that do not migrate, suspend themselves, head downward, in some dry, sheltered place.

Coldblooded reptiles, amphibians, and some fish undergo a hibernation so complete that only the proper temperature of next year will restore them to an awareness of their surroundings. Insects overwinter in the egg stage, or hibernate in the larval form as grubs or naiads, in the pupa within cocoons or chrysalids, and as adults. The worker-caste of hornets and yellowjackets search for applejack or other fermented juices to make their last days alive less grim, but first they tuck away in a safe place the fertilized queens who will start new colonies when spring returns.

. . . in leaf-turning time . . .

Meanwhile the leaves of the deciduous trees and shrubs show up briefly in their true colors. In autumn, the green chlorophyll drains from the leaves; bright pigments that have been underneath all the time but were masked by the green, now gleam, and surely in Pennsylvania we have what seem to be painted forests. Adjectives become futile to give someone, say from Oregon, an adequate idea of the riot of leaf coloration that autumn reveals in our state. Incidentally, this is a good time to study leaves. You don't have to climb to get them; they are soon all about your feet.

But while this color festival is in progress, nature isn't loafing. She is doing the neatest kind of a job wrapping and winterizing the buds for next year's new twigs, leaves, and blossoms (fruit). At least ninety percent of any healthy, mature tree is composed of dead cells. The hope of next year's growth is in these buds. Next time you pass a silver maple, stop and check on the neat packaging job that's been done on every bud.

Down below, autumn's flower show glows. Pastures, swamps, fence rows, and even last summer's harvested fields have been taken over by the year's final bloomers. There are dozens of species of asters (not always blue) and goldenrods (not always yellow), fireweeds, wild lettuce, evening primroses, Joe-Pye and iron weeds, boneset and blazing stars, and many others, chiefly members of the composite family. After frosts have killed the flowers, the fronds of club mosses (ground pines) and the Christmas fern will keep green until well into the new year.

Coming along in the cold, when only a few leaves are left clinging to their boughs, are the spidery, yellow flowers of the witch hazel. Though seemingly out of season, they are a delight for they glow in the gloom of fall. It's too bad that a plant more native to our state than William Penn is recognized by so few Pennsylvanians. Last October from a thicket of these sturdy shrubs on my lot, I took an armful of blossoming branches to a church dinner. Only one person, a boy scout, knew what it was; the rest thought it an artificial ornament.

. . . fall fishin' . . .

More and more people are looking to autumn week-ends as other chances to use the tent and camper. It's really a good time of the year: fish are usually hungry, the sun has lost its burn, annoying insects are less numerous, and campgrounds uncrowded. Try it; you'll pick up some stick-tights, but you'll make some new wildlife acquaintances. You might even see and hear, overhead, a migrating flight of wild geese.

CAN YOU IDENTIFY THESE LEAVES?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____



1. American Basswood.
2. American Sycamore.
3. American Elm.
4. Big Toothed Aspen.
5. Sugar Maple.
6. Red Maple.
7. Sweet Gum.
8. Yellow Poplar.
9. Hackberry.
10. Pin Oak.
11. White Oak.
12. Sassafras.



Notes FROM THE STREAMS

DOG FOOD—

■ Through the efforts of the Dunlo Sportsmen's Cooperative Nursery, and the St. Clair-Tremont Sportsmen, Gray Run was recently stocked with trout. This provided the area youngsters with some fine fishing. As I was walking up along the stream, a boy about eight years old came walking toward me. He had a fishless fish chain around his waist, his fishing rod in one hand and a dog on a leash in the other. I asked if he'd had any luck, and he quickly replied "Yes I caught six, but he ate 'em all." With that, he gave the dog a very nasty look and continued on his way.—***Waterways Patrolman ANTHONY MURAWSKI*** (Cambria County).

"BIG ONE"

■ One of my deputies recently tied into a "big one" while fishing a local quarry. Upon arriving at the quarry, he looked over the area and all was calm with nobody in sight. He rigged up his spinning outfit with a spinner and began casting. Shortly thereafter, he felt a tug and began reeling in the line and much to his surprise, a scuba diver came to the surface with the lure sticking in the backside of his wet suit. Needless to say, the diver wasn't overcome with joy about the whole thing.—***Waterways Patrolman R. A. BEDNARCHIK*** (Chester and Delaware Counties).

FISH RACES?

■ The Consolidated Sportsmen of Muncy Creek are building a raceway on Glen Faus's property at Hughesville, for a co-op nursery. Mrs. Faus told me this story. She was shopping in Hughesville one evening when a neighbor lady said she saw a back-hoe working on the Faus's property. The neighbor wanted to know what they were building. Mrs. Faus said "a fish raceway"—"no kidding" said the neighbor. "I didn't know you raced fish. Let us know when you're finished so we can come and watch."—***Waterways Patrolman G. W. FRANK KANN*** (Sullivan and Lycoming Counties).

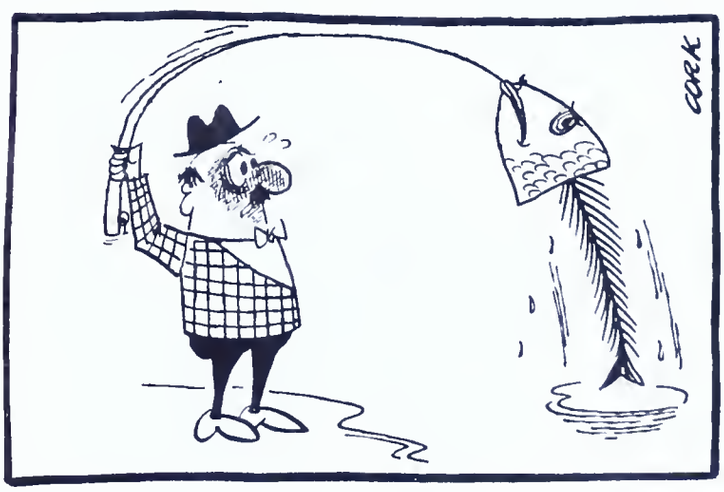
TASTER'S CHOICE

■ I know that animals and birds can be quite selective in choosing the materials they use for nest building. This incident, however, proves just how selective they can be. Last spring while in the process of taking my patrol boat out of winter storage to prepare it for the upcoming boating season, I removed the canvas cover and much to my dismay found the boat a mess. Apparently red squirrels found that the flotation material in the life saving devices was just the thing to line their nests. The funny part of the story is that out of six different life saving devices, manufactured by three different companies, they used only two of the devices—both from the same manufacturer. Perhaps I should write the company and suggest that if the boaters are not buying their product, they might open a new market with the red squirrels.—***Waterways Patrolman JAMES T. VALENTINE*** (Huntingdon and Fulton Counties).

WET WOODCHUCK

■ While on boating patrol on the Monongahela River, I noticed something that appeared to be floating about midway in the river. Upon closer investigation it was found to be a woodchuck swimming for the opposite shore. The river at this point is about 125 yards wide and with the heavy boating traffic the woodchuck was having quite a struggle. We escorted the woodchuck to the shore, where he seemed to be completely exhausted. Must be that old river was a little wider than it looked.—***Waterways Patrolman WILLIAM MANTZELL*** (Washington and Greene Counties).





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STREAM NOTES

MOMMA'S LEARNING

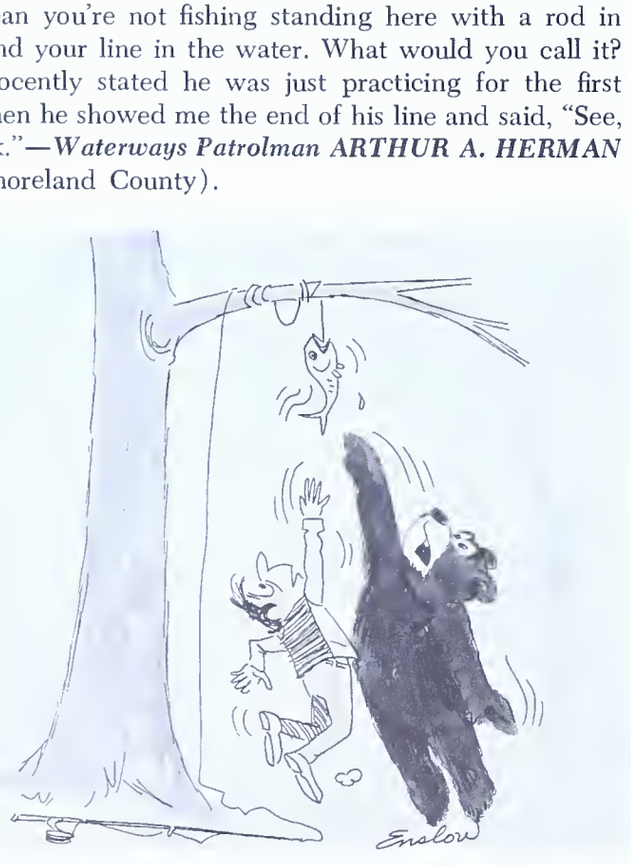
■ Twice last winter while instructing the Fundamental of Basic Fishing Course prepared and given by the Pennsylvania Fish Commission I had ladies in the classes who were learning how to fish, so they could instruct their children.—***Waterways Patrolman HARLAND F. REYNOLDS*** (Wayne County).

STRINGER FULL

■ I have witnessed just about every use that a person could use a stringer for, but on the 13th day of April I noticed a man carrying something from the Stevenson Dam on a stringer. Deputy Swank and I stopped and waited for the man to make his way to the auto. Upon arriving I could see that he had about 15 aluminum beverage cans on the stringer. I was about to compliment him for picking up his cans, when I noticed that the cans were old ones. I asked him to see his fish but he had none. He was a little upset at the mess he had found at his favorite fishing spot and spent some of his fishing time gathering and stringing the cans up. Wish more sportsmen had the same outlook. —***Waterways Patrolman STANLEY HASTINGS*** (Cameron County).

JUST PRACTICE

■ On a preseason patrol of Indian Creek just a couple of days prior to the opening day of trout season, I saw a young lad with rod in hand along the stream. I approached the boy and said, "Having any luck?" He said "No Sir." I then proceeded to tell him about fishing out of season and he promptly told me he wasn't fishing. I said what do you mean you're not fishing standing here with a rod in hand and your line in the water. What would you call it? He innocently stated he was just practicing for the first day. Then he showed me the end of his line and said, "See, no hook."—***Waterways Patrolman ARTHUR A. HERMAN*** (Westmoreland County).



TRAVELING EEL

■ While showing a live fish exhibit at the Lancaster Sports and Hobby Show last spring, we had a problem with an eel. Upon putting the live fish in the exhibit tanks, it immediately became apparent that the eel wanted out and was doing his best to get out. After securing the top of the tank so he couldn't get out (so we thought), we continued to finish erecting the display. That evening before leaving we asked the night watchman if he would keep an eye on the exhibit. Upon arriving the following morning I received the following story: About an hour after we left, the night watchman checked the exhibit—at first everything seemed in order, but on second glance he noticed the eel was missing. Calling on reinforcements the hunt began for the eel which finally was found near the door, hiding in a corner (as if he knew they were searching for him). I might add the door he had headed for was in the general direction of the Susquehanna River. To continue with the story, the eel was too dirty to return to the exhibit tank, so his captors decided to wash him off —everything worked fine until the dirt, sand, etc. was washed from his body and then no one could hold onto him. Finally someone corraled him in a bucket and hurried him into a tank, secured the lid much better than before and retired for the night.—***Waterways Patrolman SAMUEL W. HALL*** (Lancaster and Lebanon Counties).

LOUD MOUTH

■ During a lecture to the fourth grade at the Third Ward School in New Brighton, a largemouth bass appeared on the screen. Encouraging the pupils to participate, I asked "Who can tell me what kind of fish this might be?" A boy in the front seat waved his hand eagerly and shouted "That's a loud mouthed bass!"—***Waterways Patrolman DONALD PARRISH*** (Beaver County).

TOUGH STOMACH!

■ While checking fishermen on High Point Lake last winter, a man told me that the week before he had caught a 6½ pound, 28½ inch northern pike through the ice that had the following in its stomach: One 9 inch walleye, a 3 to 4 inch shiner, 2 large split shot, several hooks and steel leaders and a 5 inch piece of brass welding rod.—***Waterways Patrolman WILLIAM C. SWAB*** (Somerset County).

HEAVY LINE NEEDED!

■ It was reported to me by a local sporting goods dealer that a fisherman came into his store and requested to purchase a line of 25 pound test, or even heavier if possible. He stated that he had been fishing Brady's Lake in Monroe County and had lost several large fish. Could be that he had hold of some rather large muskies.—***Waterways Patrolman WALTER J. BURKHART*** (Monroe County).

DISTRAUGHT DUCK

■ Special Fish Warden James Hadley talked to an angler from the Blossburg area who had a surprise on Blockhouse Creek early in June. The angler was working his way to a pool that he knew held a big trout, when he saw some small ducklings and a mother duck on the water. The

mother duck was acting in an odd sort of way and he thought it was just to take his attention away from her young. He sat on the bank and watched the show for some time until finally the duck and her brood left. The lucky angler was really in for a good day when he hooked and landed a fine 18 inch brown trout from the pool. When he cleaned it he found what had been disturbing mother duck. He found a small duckling in the stomach! —*Waterways Patrolman* ***RAYMOND HOOVER*** (Tioga County).

TWO SIDES—

■ During the month of June many campers were utilizing the camping areas in my district. During one of my patrols of an access area on Keystone Lake where there is no camping permitted, I observed a family and several young lads camping on the access area. I then had to do one of the tough parts of my job in telling them that camping was not permitted in this area. After I informed them of this I was sitting in my auto taking a few notes when three of the lads, ages about 9 and 10 walked by my auto. They didn't realize I was the person who told them about camping. One lad remarked "I am sure glad that guy came along, I didn't like it here anyway." So I guess I pleased somebody at that.—*Waterways Patrolman* ***ALLEN G. STIFFLER*** (Indiana County).

"HAPPY TRIP"

■ Recently Special Waterways Patrolman Don Hoffman and I were patrolling the Monongahela River near Elizabeth when we observed a boater in a 28 foot cruiser throw a beer bottle overboard. Don and I picked up the floating bottle from the water and continued to go about the necessary procedure in order to stop a moving vessel. As we came alongside the unlucky boater, who was now also unhappy, he growled "What the #°!$%°!-? do you want?" Officer Hoffman and myself never said a word; I just held up the empty bottle. The unhappy boater looked down over the side of his cruiser and said "GUILTY." I then boarded his boat and completed a boarding form and returned to my patrol vessel. As we were about to pull apart, Deputy Hoffman said "Have a safe and happy trip upriver." This is when the lady of the boat came into action. "I hope you get a cinder in your eye," she shouted as we shoved off.—*Waterways Patrolman* ***JAMES R. SMITH*** (Allegheny County).

GREEN STAMPS!

■ During May I arrested a man for three short trout. After he paid his fine on a Field Receipt to the amount of $30.00, he suggested that we give out green stamps with our receipts. He said for $30.00 at a grocery store he would have a nice lot of stamps. I told him I'd pass the suggestion along and would probably get a promotion for it—he left the scene happy as a lark.—*Waterways Patrolman* ***KENNETH ALEY*** (Potter County).

ACCESS AREAS—

■ Being richly blessed in Mifflin and Juniata Counties with excellent warm water fishing, there has always been the problem of access for the angler and the boater. However, with the acquisition and development of six beautiful access sites by the Fish Commission, this problem has been greatly alleviated. One cannot help but feel very proud of all the favorable comments received concerning this phase of the Fish Commission's overall program to serve the fishermen and the boaters.—*Waterways Patrolman* ***RICHARD OWENS*** (Mifflin and Juniata Counties).



"OH, I'M JUST FISHING FOR EELS."

ROAD FISHING!

■ While on patrol of the East Branch of the Tunkhannock Creek, accompanied by Game Protector Altmiller, we came across a car with the trunk opened. The weather was very poor with rain coming down like cats and dogs. As we were passing the car which was parked by a bridge abutment, we saw rods sticking out of the trunk. Game Protector Altmiller backed the car up so we could investigate. We found two men in the trunk fishing contentedly. We checked their licenses, which were in fine order. As we drove away Game Protector said he saw a lot of road hunting in his days, but this is the first time he ever saw anybody ROAD FISHING!—*Waterways Patrolman* ***ROBERT E. FASCHING*** (Lackawanna County).

HOUSEWIFE OR HUSBAND

■ While on routine patrol on the Shenango River near Jamestown, I observed a family group fishing. As I approached, the wife hurriedly walked to the car. When I checked the man's license it seemed to me that he had quite an unusual occupation. When I asked him if he had this job long, he said, "For a number of years." When I showed him the license he realized that he had accidentally picked his wife's license and that the occupation was "housewife." At this time his wife approached with his license and we all had quite a chuckle.—*Waterways Patrolman* ***WARREN L. BEAVER*** (West Crawford County).

MY HILLBILLY FRIEND

I call a very close associate of mine . . . my hillbilly friend . . . not to reveal his real name. He lives on a small, sparsely settled hillside mountain farm. He has a few cattle, a horse, tractor and the equipment a small farm demands.

On the land is a small lake surrounded by woods that has bass, bluegills, perch and catfish. My hillbilly friend's recreation, after a hard day's work, is fishing the lake. After the evening chores are completed, he picks up his old casting rod, bait bucket, and lantern and walks down to his fishing spot. He baits his hook and casts out into the water, props his rod and, like all fishermen, settles down to relax and hope the fish will bite.

He gathers some wood for a fire, adjusts his lantern, tests his balance on an old log, lights his pipe and settles down to complete relaxation in the twilight. One evening I joined my hillbilly friend and sat down beside him and commenced a conversation.

With a finger on his lips he signaled me to hush. As his guest I obeyed. We sat in silence as the sun began to disappear behind a big hemlock and twilight stole in.

I began to understand his request for silence as nature's day was coming to a close. Ducks came in to land on the pond, birds found their nesting places, night insects started their humming din, and now and then a bullfrog grunted his familiar "jug-o-rum." Out of nowhere, a deer appeared in the magic hour to drink.

My hillbilly friend thoroughly enjoyed watching dame nature's changing shifts. The day shift was going to bed, the night shift was reporting for duty.

As the light swiftly dimmed the night sounds took over the world. The drone of insects, the croak of frogs, the far-off hoot of an owl, the splash of a bass chasing minnows in the pond, the whisper of an evening breeze in the hemlocks. All contributed to a great orchestra.

A man's body and mind can relax in the twilight zone. The cares of the day have been swallowed up in the night. There was peace over all the land and the lake. When the night shift was in full charge, my friend lit the fire. Its glow gave warmth to the water and the patches of his light sought out the dark nooks of the night.

Then, my friend began to talk softly explaining the many and varied problems of the farm and of his life. He told how the visits to the pond gave him relaxation and inner peace with himself and his maker. Here, his many faded dreams were revived to once more live, if only in memory.

As the moon rose casting ghostly shadows of silver all talk faded away. The rich communion of silence between friends is unexplainable. Just being with a friend watching the scene shifters on an outdoor stage performance is reason enough to be alive.

A movement by my friend to bring in his line broke the spell and it was time to go. I could not be sure in the gloom, but I would swear there was no hook on the end of his line.

Often my thoughts now drift back to that evening with my hillbilly friend. My life is much richer in the memories of those moments. For he understood that the forces of nature discriminate for no man. He is a much better citizen because of his love of the great outdoors.

by W. W. SINGER
Assistant to the Executive Director
Pennsylvania Fish Commission

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



BIG BROWNIE was landed by Gilbertsville angler George Rittenhouse while fishing Upper Woods Pond during June. It measured 28-in., weighed 9-lbs., and hit a flat fish.



SHENANGO RIVER in Mercer County produced this fine 50¼-in., 18-lb. muskellunge for fisherman Albert H. Klingensmith Jr., Grove City. It hit a spoon.



NICE NORTHERN was taken by Juanita Friedline of East Berlin while fishing Pinchot Lake in York County. It measured 36⅛-in., and hit a spinning lure.



LARGEMOUTH BASS was taken by fisherman Ronald Bondi of Duquesne in Westmoreland County. It measured 23-in., weighed nearly 8-lbs, and hit a spinning lure.



ANOTHER BIG largemouth bass was landed by Alvin Hefty of Hollisterville. It was caught at Lake Henry in Wayne County, measured 20½-ins. and weighed 5-lbs. Lure not listed.



LARGE CARP was caught by Gary McDivitt of Camp Hill last spring. He was fishing the Conodoquinet with a nightcrawler when he landed the 31-in., 15½ pounder.

FISH TALES

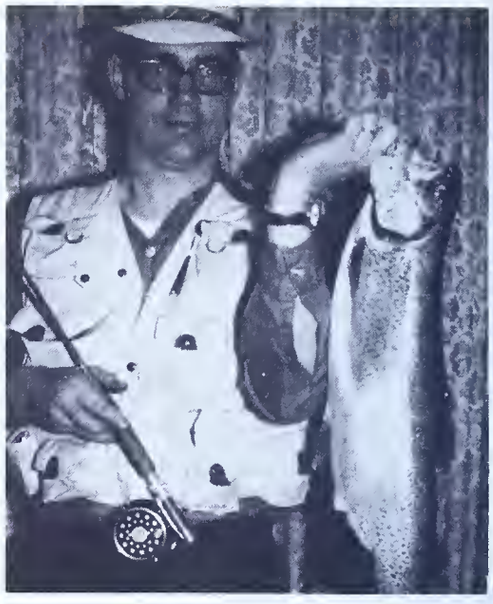
A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



KENNETH OTT of Farrell holds 45-in., 26-lb. musky he landed while fishing Pymatuning Reservoir. Won him a Senior Citation in the Husky Musky Club.



ELEVEN-YEAR-OLD Chris Wallish of Hummelstown holds 26½-in. 10-lb. catfish he caught fishing Spring Creek in Dauphin County. It took a nightcrawler.



GEORGE ALTEMUS of Levittown hit it lucky in Potter County when he landed 26-in. 7-lb., 2-oz. rainbow while fishing Kettle Creek.







SMALLMOUTH BASS caught by Thomas Pheiffer of Easton (left) measured 22-in., weighed 5-lbs. and hit a minnow when caught from the Delaware while 12-year-old Steve Hartnell of Annville (center) took 15-in. 1½-lb. rainbow trout from Lions Lake in Lebanon County. Fifteen-year-old David Tarnaski of New Middletown, Ohio (right) landed 18½-in. largemouth bass from Beaver Meadows Lake, Forest County.



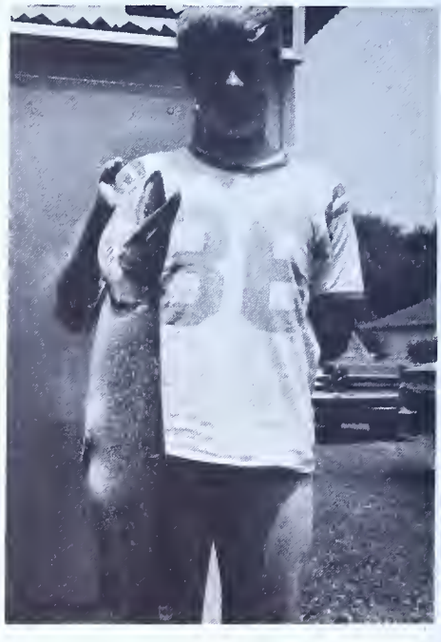
BIG WALLEYE caught by Larry Erdmann of Greenbrook, N.J., is held by the Mrs. It measured 30-in., weighed 8½-lbs, took a nightcrawler and came from Lake Wallenpaupack.



MR. AND MRS. John Boandl of Allentown hold a pair of big trout they caught during annual fishing contest. Her's was a 25½-in. rainbow; his a 19-in brown.



MR. AND MRS. Samuel Nonnemacher of Whitehall hold pair of big brown trout they caught while fishing Lake Wallenpaupack. The larger measured 20-in.; the smaller 17½-in.



FIFTEEN-YEAR-OLD Teddy Miller of Sharpsville holds 31-in. 7-lb. northern he took from the Shenango Reservoir in Mercer County.



FISHERMAN ED CLARK of Sheakleyville holds 31½-in. 11-lb. walleye he took on a Flatfish at Pymatuning Lake in May.



CLAUDE SNOEBERGER of Boswell holds 38-in. 12-lb. 8-oz., musky he caught while fishing Lake Somerset. It took a minnow.



CHAMBERSBURG angler Terry Ward (left) landed 29-in. 10-lb. brown trout while fishing the Letort near Carlisle during the summer. It battled for 20 minutes after taking a black streamer fly.

PYMATUNING reservoir in Crawford County produced 47-in. 31-lb. musky for John E. Seser Jr. of Dravosburg (right).





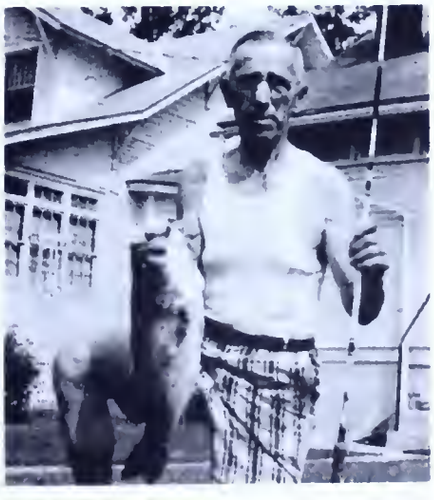
HARRY W. AUSTIN of Monroeville landed big muskellunge—47-in. 25-lb. —while fishing Canadohta Lake. It hit a spoon.



FIRST FISH Nick Russo Jr. age 8, of Chicora ever caught was this 14-in. brown trout he landed while fishing Buffalo Creek in Butler County.



TONY FOGLIETTA of Luzerne holds 15¾-in. perch, some smaller perch and some largemouth bass he caught in Susquehanna County last winter.



LARGEMOUTH BASS was taken from Upper Woods Pond by Boyd Dommayer of Palmyra. It measured 20-in., weighed 4½-lbs. and took a nightcrawler.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



WEST CHESTER fisherwoman Mrs. George Parr Sr. caught 25½-in. Citation pickerel while fishing Whitney Lake last winter.



FIRST YEAR FISHERMAN Gary Quirin of Altoona landed Citation winning 11½-in. rock bass while fishing the Juniata River at Point Access Area.



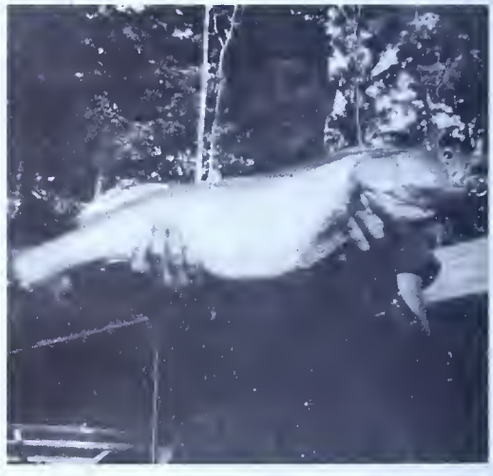
TOM KIEL of Mt. Pleasant holds 20-in. 3½-lb. largemouth he caught at Bridgeport Dam.







DICK DUNBOROW of Camp Hill (left) holds 16-in. 3-lb. smallmouth he caught on a nightcrawler near Mt. Laurel while Alan Mace of Philadelphia (center) holds 15¾-in. 3-lb. 6-oz. brown trout from Neshaminy Creek, on a nightcrawler. Joe Sapochak of Millville (right) holds 19¾-in. 2-lb. 12-oz. brown caught in Little Fishing Creek.



MATTHEW CASEY of Tafton holds 29¼-in. walleye he took while fishing Lake Wallenpaupack in Pike County. It weighed 8½-lbs.



SALLY RATHFAN of Harrisburg holds 20-in. smallmouth she landed fishing Big Buffalo Creek. It took a hellgrammite and won the lady angler a Citation.



DONALD HOHMES of Dubois holds three big walleye he caught at Kann's Lake this summer. The fish measured 27-in., 23-in., 21-in., and weighed from 3 to 7-lbs.



WALTER PAWLIK of Honesdale holds big trout he caught fishing Duck Harbor Pond. It went 25-in., 6¾-lbs. and had an 11-in. girth. Bait used not listed.





FRANK LAINE, Aaron Josefson, and John Lainey, Erie, hold perch from Walnut Creek Access Area on Lake Erie. (Right) Waterways Patrolman J. Ansell and Security Officer B. White flank Ed. Petrosky with his 23-lb. 39-in. musky.



JANE DIXON of Meadville landed 27-in. 6-lb. walleye fishing Edinboro Lake, Erie County. It hit a Creek Chub.



CHARLES HOWER, Slateford won an Angler Citation with this 31-in. 12-lb. walleye caught in the Delaware.



JOHN MALOKIS of Pittsburgh took this 48-in. 27-lb. musky from Conneaut Lake. Now Musky Club member.



TERRY SENSING, 14, of Etters landed 18¼-in. 2-lb. brown from Yelow Breeches. It won him Junior Citation.



J. C. RALSTON of Susquehanna landed this 18-in. 3½-lb. brown trout fishing Quaker Lake in Susquehanna County last summer. It took a red Abu lure.



SAM BEARD of Mann's Choice landed this 38-in. 14-lb. muskellunge early in May from Shawnee Lake. It took a minnow and won him an honorary membership in the Husky Musky Club.



STEVEN BEARD, also of Mann's Choice won a Junior Fishing Citation for the 14½-in. crappie he caught on a worm while fishing at Shawnee.





FRANK SEVENSKY JR. (left) of Scranton holds stringer of bass including an 18 and a 20 incher he caught at Lake Henry. Michael Kumernitsky Jr., 8½, of Northampton (right) holds 19-in. 3½lb. brook trout caught from Lehigh River to become Citation winner.





STEVE VALENCIC (left) of Natrona Heights holds 40½-in. 17½-lb. musky he caught fishing the Allegheny River in Armstrong County while James Thalman Jr., 13, of Trentum (right) holds 19½-in. 4-lb. smallmouth he caught at Tionesta Reservoir, Forest County.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

TOBYHANNA

MOST OF THE SPORTSMEN'S CLUBS in the co-operative nursery program have the same basic goals in mind—some express these objectives in writing. The Tobyhanna Conservation Association, Monroe County, says the thing effectively for everyone.

From the minutes of their first meeting three years ago: "The association was organized on May 15, 1966, by people who were sincerely interested in conservation measures designed to supplement the efforts of the Pennsylvania Game and Fish Commissions in the Tobyhanna area and improve the quality and quantity of local hunting and fishing."

And from the preamble to their constitution: "Believing that nature's bounty in providing man with fish and game is not inexhaustible, and that man through sincere efforts may aid in the propagation of fish and game species and their environment, the members have united to form an organization dedicated to the preservation of hunting, fishing and the spirit of true sportsmanship through example."

Now not only do the fellows at Tobyhanna have a way with words, but they also have a way with trout. Let's take a closer look at their operation. The establishment of a cooperative trout nursery was one of the conservation projects proposed at the organizational meeting. The Gloeggler brothers, Charles and George, of Tobyhanna agreed to allow the association to construct a nursery on their lands adjoining the Tobyhanna Creek. By August, 1966, two ponds were constructed and flooded. Fish Commission approval of the nursery came in November and trout fingerlings followed in June of the next year. Nursery Number 1 received 2,000 brown trout fingerlings and Number 2 got an equal amount of brooks.

Bob Brown, Cooperative Nursery Coordinator, suggested the possibility of a third raceway on the property and no sooner said than done. On October 31, 1967, this three-sectioned raceway received final inspection and approval. Since then this portion of the nursery has been expanded into six sections.

The club was furnished with 8,000 brook trout fingerlings in 1968 with this number being jumped to 14,000 for 1969 as a result of the increased facilities and excellent growth. A switch to 100% venison diet in February of 1968 is believed to be a factor in the phenomenal growth of the fish.

How was all this accomplished in so short a time? Simple—work and interest. The association, at the time of our information, had only 22 members. Clancy Dennis, club secretary, put it this way in answer to a question about project leaders: "For a club with only 22 members to accomplish so much in so short a time, each man must be a *leader* and a *worker*!" And there's no question about it, he's right.

Actually there is more to this membership situation than meets the eye in the above couple of lines. Membership requirements are modest, but much is expected by way of individual effort. Regular membership is by invitation only and a man's reputation as a true sportsman is a significant criterion. Dues are $10.00 a year and he must work eight scheduled project days to retain his voting rights regarding association policy. An associate non-voting membership is available at the same dues rate minus the work stipulation. The organization got off the ground with only thirteen members. Evidence is obvious—the boys are a bunch of hustlers for the cooperative nursery is only one of their several conservation projects.



In operation of the nurseries, the association pays no employees. Charles Gloeggler, retired, oversees the fish during the day, feeding them in the morning. Brother George, the club's president, takes care of the evening feeding. Association members have designed, engineered and executed all construction and also handle cleaning and stocking chores as needed. The group received considerable help from John Barlieb, a local contractor, who loaned equipment to aid in the original construction.

Nursery activities, of course, include the raising and stocking of trout into the public waters of the Tobyhanna Creek and its tributaries. In addition the site has become an area tourist attraction and visitors are encouraged. Area schools, primarily biology, science and conservation classes, make regular use of the facilities. And to cover all eventualities, the association purchased a liability policy for nursery facilities (might be a good idea for other clubs to consider the same).

Clancy Dennis sort of wrapped up the whole story by inserting the word *extraordinary* to the word *cooperation*, used so many times justifiably in this feature, in making their project a success. The members of the Tobyhanna Conservation Association, their friends in the area, the local Waterways Patrolman, Walt Burkhart, and others are sure that *Casting with the Co-ops* is a good thing for the fishermen of the Tobyhanna Creek region—they have the facts to prove it.

THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

COLD WATER AWARENESS

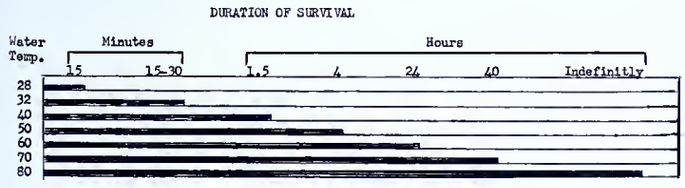
This is that time of the year when the majority of the warm weather pleasure boaters begin hauling out their rigs and the waterfowl hunter takes over the waterways.

Coupled with the reminder of a triple tragedy on the lower Susquehanna River a few years ago, this brings to mind some valuable cold water survival facts submitted by the U.S. Coast Guard Auxiliary.

Naturally we know the warmer the water the longer one can survive but what happens when the water temperature drops below the 30 degree mark?

According to the auxiliary report, the heavyweights will probably last much longer in frigid waters, at least much longer than us lightweights.

Based on U.S. Navy experiments conducted in the Arctic, "man can survive four or more days at temperatures over 70 degrees but, after that, factors in addition to chilling, such as fatigue contribute to collapse and drowning. Even at 70 degrees, the time limit is approximately 40 hours due to the gradual fall in body temperature."



Protective clothing helps retain body heat by reducing the water flow over the body but while most waterfowl hunters are heavily clothed, water soaked clothing adds weight and makes it all the more difficult to stay afloat.

Heavy clothing may be discarded in the water but it's the wise hunter who keeps his life saving devices readily accessible and wears a life jacket if necessary.

While on this subject a release from the U.S. Coast Guard this year indicates that wet suits, such as those worn by scuba divers, could prove invaluable to winter boaters.

Referring to an incident in which three duck hunters were thrown into the water and only one survived, the Coast Guard reported the lone survivor was in good shape possibly because he wore a wet suit under his clothing.

According to life expectancy charts based on long experience, the unprotected capsizing victim will become unconscious in 30 to 60 minutes in 40 to 50 degree water. Death follows within one to three hours.

Properly fitted, a wet suit serves as an insulator to preserve body heat and thus allows the wearer to remain conscious much longer in cold water.

USCG SUGGESTS FLOAT PLANS

We've heard of flight plans but now the U.S. Coast Guard, and for good reason, recommends the use of float plans in case of an emergency.

A float plan is nothing more than a schedule of events planned by the boater. Planned for the benefit of others, members of the family for example, it tells them where he will be cruising or fishing and when and where he plans to return.

No doubt the Coast Guard has in mind those boaters who use coastal waters but this could come in mighty handy even on a brief fishing trip on one of Pennsylvania's waterways.

You can always shear a pin before a storm breaks and have to take refuge on an island or the opposite shore or perhaps run out of fuel or get lost in heavy fog, even on the Susquehanna. It is no fun so even a brief penciled note on the kitchen table leaves you with the reassurance that help is on the way if you fail to turn up at the appointed time.

COAST GUARD AUXILIARY HEARS CAPT. LEISING

Capt. Charles E. Leising, Assistant Executive Director, Office of Watercraft Safety, Pennsylvania Fish Commission, spoke at Change of Watch ceremonies held earlier this year at Hanover.

Also on the speakers' platform was William B. Matthews Jr., Chief, Boating and Recreation Division, Department of Chesapeake Bay Affairs, Maryland.

Highlighting the dinner affair was the installation of a York man, Ward M. Donahue, of 127 N. Diamond St., as Captain of Division V, U.S. Coast Guard Auxiliary.

Installed as Division Vice Captain was Elwood L. Manahan, of 5038 Erbs Bridge Rd., Mechanicsburg.

Staff officers taking the oath of office were: Melvin Horning, Middletown, public education; John Markle, Lancaster, materials; Leo L. Lawler Jr., Hanover, recorder; Earl H. Angel, Hanover, treasurer; Richard Filbey, York, Courtesy Motorboat Examinations; Paul Henninger, Frederick, operations; Earl Snyder, Millersville, public relations; Richard Welsh, York, USCG Academy introduction; Anthony J. Savicky, Lancaster, communications; and Donald N. Black, Lancaster, U.S. Power Squadron liaison.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Pittsburgh Marine Consultant

FROM L. E. N., MONONGAHELA:

"When laying up an inboard boat for the winter, is it best to plug the exhaust or leave it open?"

—Various experts disagree on this point, and it doesn't really seem to make a whole lot of difference. Being naturally lazy, we would vote for leaving the pipe open, and have done so for many years with no ill effects. The engine is the important thing, and you should be sure that the block, heads, water pump, oil heat exchanger and all other portions are drained completely, to avoid freezing damage. Don't neglect the muffler, either. One very fine boatyard runs a half-pint of Wynn's Friction Proofing oil through the carburetor with the engine running just prior to draining the block, and this appears to be very effective in preventing rust in the cylinders, stuck valves and rings, and similar over-the-winter problems. If your boat is a cruiser, don't forget to drain the head (toilet), too.

FROM V. C. F., BEAVER:

"I plan to store my 23-foot cruiser outside over the winter, and I have been advised to use a tarpaulin rather than plastic to cover the boat. Wouldn't the plasic be more waterproof?"

—It certainly would, and airproof as well. On warm winter days, the temperature and humidity under a plastic cover would be something awful, and just about perfect for the fungus that causes dry rot. Canvas allows for more air circulation, and the few leaks that may drip water on your boat are a much smaller problem. When covering a boat for outside winter storage, it pays to build some light framing to keep the canvas off the boat, not only for better ventilation, but because the winter winds rippling the tarp will grind off paint wherever the cover touches. Framing the canvas up like a tent will also eliminate sags where snow and water collect.

FROM C. H. R., PITTSBURGH:

"Last fall I drained my 185-hp inboard carefully, and the block still cracked. What can I do to keep this from happening again?"

—Unfortunately, a few of the very popular 283-cubic-inch blocks by Chevrolet that are used by nearly every boatbuilder have some internal passages that do not drain well. Your problem is rare, but does occur. Tipping the boat sternward as far as possible with all the drain plugs removed should insure that all the water runs out.

FROM L. A. C., UNIONTOWN:

"Can you give me some recommendations for laying up a boat trailer for the winter?"

—First of all, pull the wheels and carefully clean and repack the bearings with grease. If the trailer has brakes, go over these carefully, removing all moisture and rust and lubricating the moving parts. Keep lubricants off the friction material, but wipe a light coat of rust-proofing oil on the rest of the brakes, and the whole trailer. A spray can works well for this. Finally, go over the wiring and lights, cleaning all contacts and spraying on a rust-preventive. You can also touch up the scratched spots on the paint at this time, to prevent future corrosion. Block the trailer up so that the weight is off the tires over the winter.

FROM G. M. A., SLIGO:

"What precautions should be taken in storing an outboard motor for the winter?"

—Flush out the cooling system by running the motor in clean water for about ten minutes, then stop it. Empty the tank, and put in a half-pint of mixture with three or four times the normal proportion of oil. Restart, and turn the carburetor control to full rich. The engine will stall out, but by this time all internal parts will be well coated with oil. Either dry out the tank or store it full of fuel. Keep the engine in a heated basement or garage, and wipe down the exterior with a light coat of oil after cleaning it thoroughly.

FROM S. B. R., ROSCOE:

"The planks on my john boat shrink so much over the winter that you can see daylight through them, and I would like to be able to use the boat on some of the warm winter days. How can I keep it tight while laid up?"

—Store the boat (in your heated garage as before) upside down on a pair of sawhorses, and cover it with old burlap bags. Wet the bags down twice a week, and the moisture will keep the seams tight all winter long.



"NOW THEN, DOWN TO REALITY. I THINK YOU COULD AFFORD A WELL-BUILT DUGOUT CANOE . . ."

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PENNSYLVANIA

Angler

NOVEMBER, 1969

the Keystone State's Official FISHING · BOATING Magazine...

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Single Copy



ALLEGHENY MUSKY FISHING

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YOUGHIOGHENY RIVER RIDE

page 16

CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



LAKE ERIE ISN'T DEAD

A few weeks ago the National Broadcasting Company produced a television program entitled, "Who Killed Lake Erie." Scenes of undescribable filth involving domestic sewage, industrial wastes, trash, rubbish and oil and even a burning river highlighted the story.

The program title implies Lake Erie is dead and presumably those responsible for the conditions of pollution shown in the film were its killers.

Actually, Lake Erie isn't dead! In fact it is far from dead and may be emerging once again as an exciting fish producer. This does not change the fact that several million Americans have made a good try at killing this extremely productive lake. Fortunately "killing" a great lake isn't easy and in spite of man's activities the lake has persisted as an important commercial fishing and recreation attraction.

It is pleasing that Pennsylvania is far ahead of Michigan, Ohio, New York and Ontario in cleanup efforts. It now remains for these other shareholders of Lake Erie to add emphasis to their pollution abatement programs and speed the recovery of this lake.

Evidence that Lake Erie is not dead is readily available to anyone who is truly interested in the subject. One of the most obvious forms of this evidence is the abundance of fish life in the lake. Certainly pollution and quite possibly overfishing years ago led to the decline of the famous blue pike and the white fish.

The loss of these extremely valuable species cannot be minimized. Whether or not conditions in the lake will ever again support abundant or even modest populations of these fish only future generations will know. It is tragic but typical that we must destroy natural resources before we truly recognize their value.

Fortunately nature is extremely resilient and Lake Eric is still very much alive and highly productive. Smelt, yellow perch and sheephead have become more abundant in recent years. None of these fish are as desirable as the lost white fish and blue pike, however, their increasing abundance clearly points to a natural shift to accommodate changing environmental conditions within the lake.

The recently introduced coho salmon have for the moment shown great promise as an exciting sport fish that can thrive in Lake Erie. Early returns seem promising and coho fever will no doubt grow as the number of these fighting silver beauties introduced into the lake is increased.

Actually the most important job the coho can do for Lake Erie is to help keep alive public interest in the quality of this lake. Now, while coho fever is high and while public concern for the preservation of our environment runs high, is the time to press for an all out effort to control and abate pollution of this vitally important water resource.

Most of us find little difficulty in recommending the other guy—namely industry—get busy and clean up. Sadly it is a far different story when we personally have to shell out for new and improved sewage treatment plants to handle our own wastes.

Other than a few isolated cases, everyone who isn't on an effective and updated sewage collection and treatment system is a polluter. Now is the time to see if you qualify as a polluter. If so there is no better time than now to get your name and your communities' name off the "polluter" list!



MEMORABLE TRIPS

Sirs:

Enclosed find a check for five dollars covering my three year renewal of my subscription to Pennsylvania Angler.

As a native Pennsylvanian the "Angler" helps me keep in touch with happenings "back home."

I would also like to take a moment to thank the Fish Commission for the wonderful work being done in the line of "fly-fishing" and "Fish-For-Fun" areas.

We have a daughter in Harrisburg and we like to make what we call a "grand tour," starting from Kenmore going to Brookville to Boiling Springs, then to Harrisburg.

The return trip, of course, includes a stop at Fisherman's Paradise, where we have fished since its opening.

The wonderful people we meet at these projects, along with the fish that can be caught time and time again make each trip a memorable occasion.

Thanks again for making this possible.

J. W. Shew, Kenmore, New York

TROUT STAMP

Gentlemen:

Mr. Jerome Grehl can take his suggestions and go back to Minnesota. The Pennsylvania Fish Commission is doing just fine.

He stated in the July issue Leaky Boot section that a trout stamp would eliminate a large number of kids and fish hogs. He is right. Then the man with a trout stamp would be the only *fish hog* there.

He shouldn't kid himself. The only one that wouldn't be fishing are the kids that couldn't afford a stamp.

I have seen some pretty proud kids the first day of trout season, and to me that is better than fishing itself.

He shouldn't worry so much about the stocked trout but rather try to catch a few of the old timers that are in there laughing at him. Most of them will be in there next year when the Commission stocks again!

Dean H. Ramsey, Sr., Shirleysburg

HANDLING SNAKES

Gentlemen:

While reading the June issue of the Pennsylvania Angler, I came across something which disturbed me a bit because of the effect that it may have on the young people who read this fine magazine.

In the article "Snakes Alive," Tom Fegely tells of the fine work that Don Kohler is doing with and for the young people of Pennsylvania in the way of education about our reptiles in Pennsylvania. I have done this same thing in the Lancaster area for many years, and know how it is accepted.

Tom writes about proper handling of reptiles, and then shows a picture like the one on page 26 with no explanation. Most people, I am sure, will ask if it is okay to handle a copperhead in this manner. I know better, but what about the boy who doesn't? Is this fair to him to see this without an explanation?

Maybe I missed something in this article; if so, please advise.

I enjoy your magazine and the work it is doing.

John R. Gockley, Lancaster

It was not the intention of Mr. Fegely, Mr. Kohler, or the Pennsylvania Angler to encourage inexperienced persons (young or old) to attempt to handle reptiles, but rather to show that reptiles are not to be unjustly feared, only respected.

Inexperienced persons SHOULD NOT attempt to handle poisonous reptiles. Individuals interested in handling reptiles should first learn the proper techniques by working with someone who knows what they are doing.

—Tom Eggler, editor

NO MUSKIES

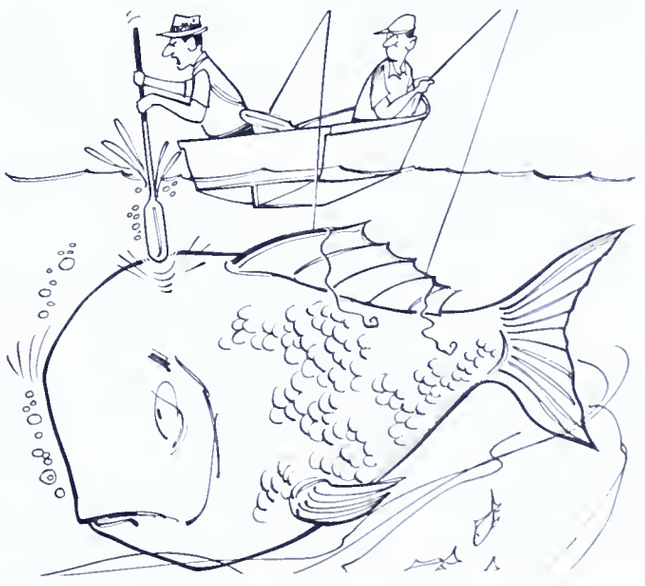
Gentlemen:

Could someone on the Pennsylvania Fish Commission please tell me why Northern Pike and Muskies are not stocked in our lakes in the northeastern part of the state. (Lake Wallenpaupack and others). When I read the Angler, it seems to me most of these fish are caught in the western part of the state.

John L. Wilson, Scranton

Over half a million muskellunge alone were stocked in counties in the northeastern part of the state from 1960 through 1967 and increased numbers are reported caught each year, although only now is the effect of these numerous plantings starting to appear. Fishermen in Pennsylvania's northeast shouldn't have to look far in the future for plenty of muskie fishing!

—Tom Eggler, Editor



"NO WONDER WE HAVEN'T CAUGHT ANYTHING—IT'S ONLY A COUPLE OF FOOT DEEP HERE!"

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PENNSYLVANIA'S OFFICIAL FISHING AND BOATING MAGAZINE

NOVEMBER 1969 VOL. 38 NO. 11

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D. THOMAS EGGLER, EDITOR

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FISHING OUTLOOK

By-- Stan Paulakovich

NORTH BRANCH WALLEYE

DURING THE HEIGHT of last spring's Shad Run on the Delaware I asked an old trout fishing buddy of mine if he was going up to give them a try. His answer made me realize that too many fishermen, myself included, become more or less specialists in one species of fish and miss out on a lot of good sport when other fish are hitting. He said "No I'm not, just give me a trout stream with a few fish in it and some flies hatching and I'm happy."

Well, the Shad run is long gone and the season for trout in streams is over but there is still plenty of good fishing available. Whether you are a Musky addict, a trout purist, or a bass fan now's the time to gather up your gear and head for Walleye water and there are plenty of these spots in the state.

Generally overlooked as prime Walleye water is that section of the Susquehanna River from Shamokin Dam upstream to Sunbury and on up the North Branch to the vicinity of the mouth of Wapwallopen Creek—a distance of about 45 miles. During the last two years Walleye fishing in late October, November, and into December sometimes bordered on the fantastic. And it should continue this year.

In mid-October, just below Sunbury at the base of the dam which crosses the river, seems to be the starting point for the Walleye run. As the river rises the fish progress upstream. Fishermen from towns along the river plus those from the Kulpmont–Mt. Carmel area had fishing like they'd never dream of during 1968. Two special waterways patrolmen in that area caught and released 70 Walleye in a one hour period last November near Sunbury.

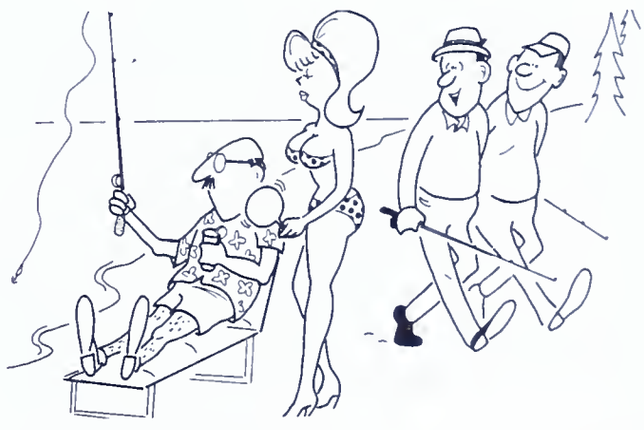
Some of the favorite spots along the river are at the base of the dam below Sunbury and across the river at Shamokin Dam, just below the new Fabri-Dam in Sunbury, at the jetty of the Danville boat club, at the mouth of Fishing Creek in Bloomsburg, the foot of Line St. in Berwick, and at the mouth of Wapwallopen Creek in Luzerne County. These plus the foot of any riffle proved good during 1968. Time of day seemed to have little effect on fishing last year and slightly discolored water with rising or falling levels proved best. Fish generally ran in the 17 to 21" class last year with an occasional one up to 26" being taken.

Although many lures took fish the most popular in evidence along the river were the 4 to 5 inch Rebels or Rapalas either in gold or silver and number 4 or 5 C.P. Swings again either in silver or gold. But by far the most popular lure and the one that out fished all others was the size 4/0 or 5/0 jig tied with bucktail dyed yellow, or a solid yellow head. This consistently took fish. No special skill is needed here, just toss it in and bounce it along the bottom in short jerks and you should soon tie into a Walleye. A local angler who is handicapped by having just one arm was observed with his daily limit on more than one occasion last season.

One of the gathering spots for fishermen in the area is Newman's sporting goods store on 928 South River Drive in Sunbury. Here river fishermen come in to check on conditions and to talk about their catches or the ones that got away. Bait is available here as well as the latest news on what's going on along the river. There are plenty of hotels and motels in the area if you're planning a week-end trip.

Smallmouth Bass and Musky which were introduced several years ago offer an added bonus to fishing. There are plenty of roads along and to the river which make for plenty of room for everyone.

However there are a few places in this stretch where boat access is available. Anyway, shore fishermen seemed to do much better. If you're planning to do some boat fishing check with our local Waterways Patrolmen for further information. In Columbia and Montour Counties contact Waterways Patrolman Bob Perry, 3829 Old Berwick Road, Bloomsburg, Pa. 17825. Phone 717-784-3410. In Northumberland County call Lee Shortess, Box 491, Sunbury, Pa. 17801. Phone 714-473-9585. Either man should have all the necessary information on these areas.



"LET'S ASK HIM WHAT KIND OF BAIT HE'S USING."

COMING---

Winter Season

Beginning December first trout fishermen can again enjoy the sport as the annual winter season opens on lakes of 10 acres or more. If you're not ready yet, this is the month to start gathering the equipment you may need.

Hunting For Fishing

One of the feature articles in your coming December issue of the Angler will be a story titled "Hunting For Fishing in Czechoslovakia." It's all about a trip Scotsman Roderick Wilkinson made to this communist country recently in an attempt to do some fishing.

Winter Cruising

Another big feature in the December Angler will be an article by Steve Butchock about boaters who don't give up their sport just because winter has settled over the countryside. It happens on the Allegheny!

Christmas Gifts

If you're looking for a simple way to solve some Christmas shopping problems and if some of the people you're shopping for are fishermen or boaters, then fill out the Christmas subscription card inserted in this issue of the Angler. And keep in mind that next month you may also buy a 1970 fishing license as a gift for your fishermen friends.

Pennsylvania Fishes

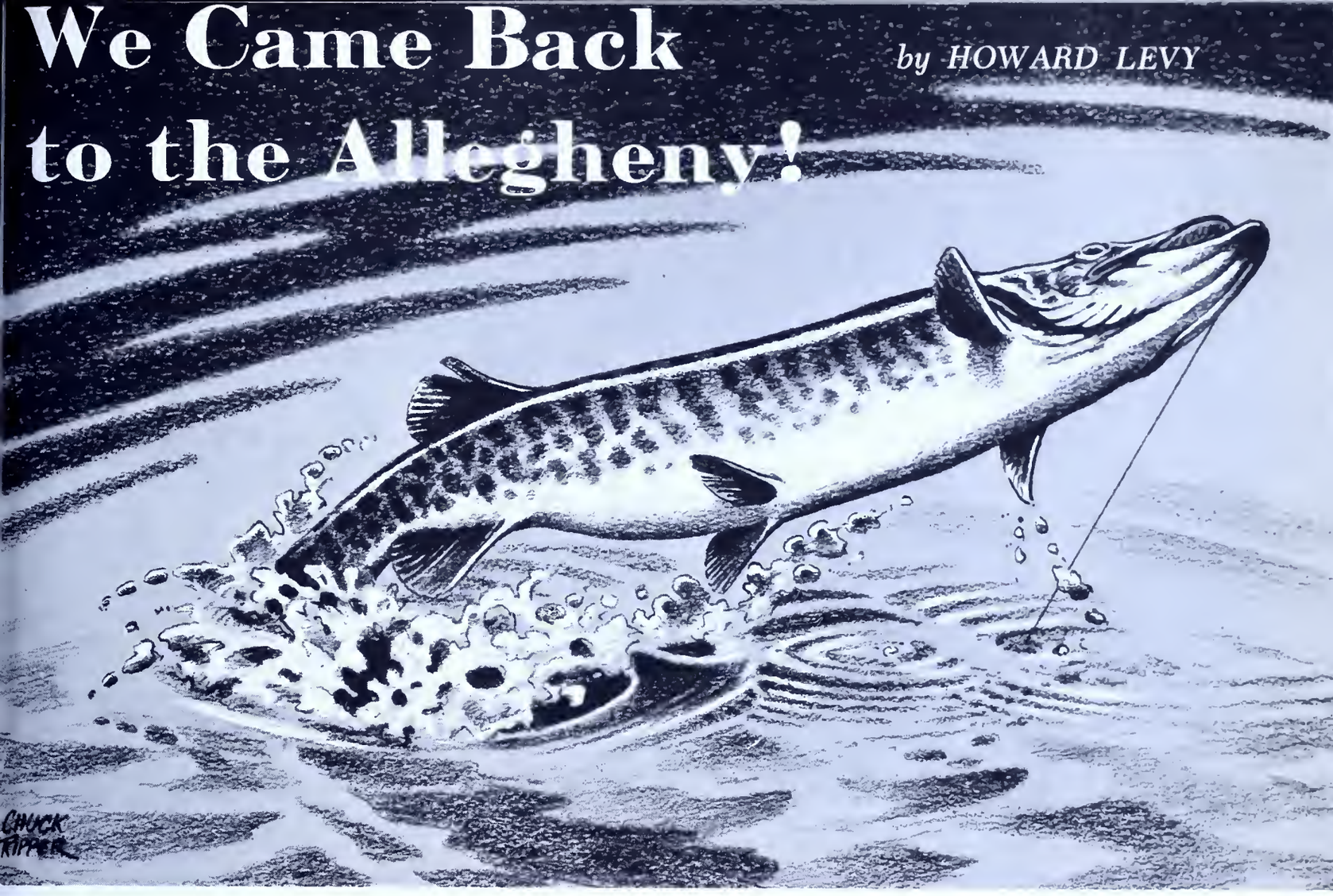
Another nice Christmas gift! Now available from the Pennsylvania Fish Commission is an updated version of Pennsylvania Fishes completely illustrated by well-known wildlife illustrator Ned Smith. Cost for the 32 page booklet is just 50¢. See application on the rear cover of this issue of your Angler.

Noises of Nature

Carsten Ahrens whose article "Afield In Fall" appeared in the October issue of the Angler, will be with us again next month. His new piece is titled "Noises of Nature." More enjoyable reading!

We Came Back to the Allegheny!

by HOWARD LEVY



EDITOR'S NOTE: Howard Levy is probably one of the best-known muskie fishermen in northwestern Pennsylvania. In the many years he's fished for these freshwater whoppers he's covered a lot of territory. He probably lands more muskies most years than many fishermen see in a lifetime.

One of his favorite fishing haunts is the Allegheny River. Here's how it turned out one weekend last year!

FOR YEARS AND YEARS, I HAD THOUGHT of myself as a Gourmet. I not only liked food—it seemed to like me. It stuck with me and ran my waist line inches upon inches so that, periodically, I would have to go on a rigid diet. Yes, I loved to eat. So many delicious things. The roast pheasant with currant jelly and wine sauce; the beef stew with the aroma of vegetables and spices and rich meat permeating the air; even the breakfast of smoked ham and eggs which seemed to be so much a part of the frosty fall morning when the gold leaves started to fall from the hardwoods. Yes, I seemed to like to eat most anything . . . with one BIG exception. I hated to eat my words! They were not bitter as gall—they didn't gag me. They just annoyed me and became tasteless things which had to be swallowed like a bitter pill. This story is about the time that these words backfired.

Most men like to brag a little and, of course, this attribute is more pronounced with fishermen. In the business world, men often brag of the big deal where they got in on the ground floor. You often hear them brag of the stock they bought at the year's low, which headed skyward, then split two for one, and which was once again being prodded by the bulls. You've heard them brag about their brilliant offspring; about the great mileage they are getting on their new car; yet none of these braggings, this sheer braggadocio, can touch a candle to the even-most-simple-efforts of the fisherman. A fisherman seems to delight in telling of the place he found which had been passed over by others—and due to his "extra" skill, his newly designed baits fished with near-magic action—this place had produced the biggest, the fightingest fish and the most phenomenal battles. You've heard them. Maybe you're one of them. Your writer knows that HE qualifies, with honors.

Twenty five years ago, and even before that, I fished the nearby Allegheny river heavily, especially in the late fall of the year when the nip of frost would bring patches of fog coming off the slow moving river eddies. Our goal then was smallmouth bass. We fished the river after dark, using surface lures, slowly dragged on the calmer water of the eddies. And we were often rewarded with excellent catches, bass ranging from two to five pounds. But as the river became polluted and as the fish population seemed to dwindle, we turned our fishing steps to other areas.

Two years ago, WE CAME BACK. Yes we came back . . . NOT to the hair cream which so effectively uses this

continued on next page



CONTINUED FROM
PREVIOUS PAGE

We Came Back!

phrase . . . but to the old Allegheny. The river had been cleaned up in many areas. Heavier stocking of not only bass, but walleyes and muskellunge by the Pennsylvania Fish Commission started to show up in better catches. And the use of jigs (written up many times in this publication) allowed long casts from shore, resulting in many fabulous catches. Our tackle habits changed. We used lighter spinning rods, closed bail reels, lighter monofilament lines, putting in mothballs the heavier bait casting rods and reels. We then started making our own jigs, first because we lost so many of them while jigging off the rocky and debris-strewn river bed; then because we found we could develop new patterns, new weights, new colors and new designs.

We started catching big fish. There were Muskellunge which ranged from thirty inches to forty eight inches. Muskellunge which would slide out of the river as smoothy as an arrow leaving a bow; yet which would splash like a dropped log when re-entering the water. Muskies which had to be netted with extreme skill and caution among reeds and willows and weeds which cluttered up the shore line; each twig, each branch an avenue for escape via a snagged line.

There were walleyes which often got above the thirty inch mark. There were fat, strong muscled carp at which we formerly looked down our noses but which we now found gave us long and dogged fights. Carp that would often tip the scales at fifteen to twenty five pounds!

And there were even suckers, the heavy red-tailed suckers which would weigh from five to nine pounds. We were amazed to learn that all of these fish would actually hit a jig. The predator fish, the so-called game fish like the muskies, the walleyes and the bass would hit the jig even when it was moving rapidly; the carp and the suckers needed a slower moving jig, ofttimes picking it up as it rested for a brief few seconds on the river bed. We even caught a strange fish we called a QUILLBACK. They ranged from ten inches to twenty two inches in length, were gray in color, shaped something like a shad, had a very small sucker-like mouth an inch under their snoots, but they got their name from a dorsal fin which had the front spine enlarged and elongated, reaching quite a bit higher than the rest of the dorsal. We quickly identified these fish in a fish encyclopedia picked up in Carlyle Sheldon's excellent outdoor library. They are officially called a Carp-Sucker, or Quillback sucker-carp. They would fight well, but we couldn't find any gourmets who savored the oily flesh which was well laced with tiny bones.

We couldn't keep our big mouths shut! We had to pop off! We had to exhibit the fisherman's prerogative of bragging.

We had to tell those fellows who had just spent a poorly productive week in Canada that they should have stayed at home on the nearby Allegheny. We had to send the newspapers a report. We had to visit Hoppe's Tackle shop and brag about the catch we'd made the night before.

So . . . in spots where we had been the lone casters, spots like Magee Run and Althum and Star Brick, we now found that at times it was difficult to park our cars. Too many other fishermen. Yet we continued to catch fish . . . and boast about our catches. "Man, you should have seen the action we had yesterday." "Sure, we go out in any kind of weather, often needing to break the ice off along the river's edge to let us bring in a big fish without cutting the line." "This afternoon, we caught 150 pounds."

So it was bound to happen. The letter came from Pittsburgh. These three fellows were good friends. The rumors

of our good luck (Rumors? Heck, it was like blasting the news with a giant size bull horn!) had reached their ears. They would be up bright and early come Saturday morning and would fish with us Saturday and Sunday.

Early Saturday morning they arrived. Yes, it started out to be a good day. It was cloudy, temperature in the high thirties, patches of melting snow dotting the dark mud along the river shore; and the river just high enough and off color enough to promise good fishing. Yes, it started out to be a good day UNTIL those 3 men got out of their car . . . and as the last one came out, he dragged . . . one in each hand, a large movie camera and another camera which looked like a Rolliflex . . . then came the tripods and the saddle bags evidently filled with filters and meters, flash bulbs and extra film. And right there is where the day started to go sour, for in my own opinion, I have long known that the best way to make sure you have a LOUSY day's fishing is to have someone, some picture-taking-nut, bring along a camera of any kind, intent on getting "ACTION." It's one of those evil-eye things; one of those Jonah-like curses. I can catch fish like wild-fire; yet let one person bring a camera along to record, for posterity, a fish jumping, a fish striking . . . and the old feeling goes right deep into my bones. That's the time the fish start a No-strike strike. Oh, sure . . . you see snap shots and movies of fish hitting plugs, of fish jumping and fighting. Television anymore is full of these action shots; but I always think that they are either taken in far away spots where the fish are so hungry you can depend on them hitting anything from a beer can opener to a piece of chicken skin; or else the photographers have the patience of Walt Disney's men, who have been known to sit in a blind for days, weeks and even months to get action shots of wild life. I just can't believe that any of these shots were casually taken on an average day's fishing trip.

And that's the way it was all that Saturday. We tried Trunkeyville eddy, we tried Magee, and Althum and Star Brick and Buckaloons . . . but every time I turned around and looked over my shoulder, there were those two evil eyes staring at me, daring me to produce something in the line of action for them; waiting impatiently, seemingly glad to prove that MY bragging of the river fishing had been unfounded. By late afternoon that Saturday, the sum total was one fat and lazy carp offering no action for either the movie camera or the Rolliflex. The two evil eyes kept looking at me, challenging me and the river to produce its bounty and verify our claims. Time seemed to last forever until late afternoon, when the owner finally folded up the tripods and put those bad luck charms into the trunk of the car. The three decided that this river fishing wasn't what WE had it cracked up to be and that, instead of staying over for the Sunday fishing, they would head back to Pittsburgh. With fond goodbyes (?) and our apologies for the poor fishing, their car pulled away and we got into our car for the trip home. It was getting dark, yet in front of me as brightly outlined as though they were in marquee lights, were all my words which had so highly touted the river fishing. They kept flashing in front of me; yet I knew, deep in my heart, that it was those two evil-eyed cameras which had caused our downfall that day.

It was quite dark when I arrived home that evening. As I took off my fishing clothes in the back room, I heard female voices in the main part of the house and found that a girl friend of my wife's had decided to spend the weekend with us.

After dinner and while the girls were cleaning up the table and the dishes, I walked into my back room workshop; still crestfallen and low in spirits as a result of the poor day's fishing. I sat at the workbench and, nearly automatically, started tying some bucktail hairs to jig heads, replenishing the stock we had lost during that day's fishing. I was lost in thoughts, punishing thoughts, eating words—plain, unseasoned words, each one sticking in my dry throat. . . . "Man, do we have great fishing in the Allegheny at this time of the year—" "Brother, you should tie onto one of those jumping muskies. Sure, we do it all the time. . . ."

The silence in the back room was broken with "How about making me one of those things for my hat?" I turned away from the bench and found that Dorothy, my wife's friend from Erie, had been standing there, silently watching me. "Sure" I quickly replied, glad to be snapped out of my low mood. "What color do you want?" She thought a moment, then said "Red, white and blue." I screwed my face into a whimsical smile and thought "Maybe she thinks I can't do it" . . . then grabbed a small jig head, tightened it in the vise, poked through the bucktail box until I had three pieces . . . one a vivid red, one a sky blue and a pure white one. I snipped pieces from each tail and quickly tied them onto the jig, doped the Nylon thread with clear nail polish, then removed the completed jig from the vise and trimmed the tail end to a square-cut-brush. I handed it to her and watched her turn it side to side, admiring it, then holding it jauntily alongside her light brown hair. She thanked me and went back to join Joan.

The red, white and blue color had intrigued me. Funny, I had never before made up a jig using these colors. I grabbed another jig from the box, tossed it back when I found it to be a ¼ ounce size, turned over a few more heads until I found a heavier one, a half ounce size—tightened it in the vise and finished another red, white and blue jig. I smiled at this Yankee-Doodle color combination, then tossed it into my jig kit, turned off the light and went in to join the women.

Do you think fish can smile? You don't? You mean you've never stared into the glass walls of a SeaQuarium and watched the graceful porpoises glide by with what certainly looks like a wide smile on their huge mouths?

Sunday morning I was up way before daylight. I had my breakfast, put on my fishing clothes and headed East towards Warren, breaking a path on the inch or more of wet snow covering the highway.

I arrived at Star Brick access area about 7:30, half walked, half slid down the slippery bank to the river. I was about to cast out the jig which had been the last one I cast the night before; a white jig, now somewhat sullied by river bottom mud. As a quick thought, I cut it off and dug out the Yankee Doodle, Patriotic Jig I had made the night before. A blood knot with the end secured by

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NEARY FIFTEEN THOUSAND city youngsters enjoyed some rare moments of fishing last summer during the Pennsylvania Fish Commission's second year of "Cane Pole Fishing."

by
Steve
Ulsh
Cane Pole
Coordinator

Summary-

CANE POLE FISHING --1969



CATCHES were carefully discussed—and guarded—by the lucky youngsters.



A TOTAL OF 14,747 YOUNGSTERS participated in the Pennsylvania Fish Commission's "Cane-Pole Program" this summer.

Started during the summer of 1968 with the endorsement of Governor Raymond P. Shafer, the Commission's Cane Pole program was expanded from 3 sites last year to 11 sites this year in Allegheny, Butler, Crawford, Blair, Berks, Lehigh, Montgomery, Monroe, Philadelphia, and York Counties. The Pennsylvania Fish Commission provided all equipment used by the youngsters, including 8-foot cane poles complete with monofilament lines, bobbers, and barbless hooks. Bait was provided to each child fishing at one of the "Cane Pole" lakes. Waters used for the programs were stocked with catfish, carp, sunfish, bluegills, and other panfish by the Commission's Fisheries Division.

Final figures showed the 14,747 youngsters participated in a total of 144 days on which the 11 sites were open. In most areas the Commission had the cooperation of local recreation departments, church groups, settlement houses, and other social agencies in transporting the youngsters to the site and in helping to supervise their fishing activity.

The Cane Pole Program was also introduced for the first time this year into recreational programs at two State Hospitals—Byberry State Hospital in Philadelphia and Norristown State Hospital in Norristown. Both institutions had suitable fishing areas located on their properties.

FOR MANY IT WAS THEIR FIRST fishing experience. Living far removed from "the great outdoors" many of the city children who were brought to the programs joyfully rolled on the grass before taking up their "cane poles" to surround the fishing ponds (below). Help was provided by city recreation departments, church groups, and others in supervising the program (above).



by JIM HAYES

Wives, if you're having trouble with a husband who has a serious fishing habit perhaps you can get him some help from . . .



FA MEMBERS DISCUSSED THEIR PROBLEMS OPENLY AT FREQUENT MEETINGS . . .

Fishermen Anonymous

IT'S OVER NOW—split, splintered, fractionalized into a dozen different groups. But it was a great idea while it lasted.

It started as a broad-based organization, Fishermen Anonymous, from the chance meeting of several compulsive anglers at the barroom of the Wharton Hotel in Potter County.

"We weren't against fishing," said Hank, one of the founders. "Don't get me wrong."

Hank, who otherwise prefers to remain anonymous, once took off on a fishing trip and missed his daughter's wedding.

"Fishing in itself is not bad," he went on. "It's when it can't be controlled that it becomes a sickness."

Fred, another charter member, nodded in agreement. "When you're a compulsive fisherman," he said, "you neglect everything—drinking, gambling, women, everything—just for a chance to go fishing."

Fred once ran up a bill of $121.75 at a sporting goods store. Another time he went on a binge and bought up every Colorado spinner in a three county area.

"We were unable to think rationally at times," Fred's wife, Imogene, added. "Life seemed hardly worthwhile. Once I hid his fly box. The next thing I knew he was out in the yard digging worms."

Fred grimaced. "There's nothing you won't do," he said, "no depths you won't sink to."

Hank thought back to the time he walked out on a game of stud poker to go fishing. He was holding aces over jacks.

"It doesn't mean we don't love our gambling, drinking and families," he explained. "We usually do. But fishing is our first concern, above all else. You get this uncontrolable urge."

"For myself, I never minded that much," Imogene said. "I knew he was that way when we got married. It was when the kids started growing up that things got bad.

"Like he'd be gone fishing for a couple months, and after several weeks they'd notice this and ask me, 'Where's daddy?' What are you supposed to tell them?

"Mostly I'd say, 'Oh, he's out boozing it up or gambling or chasing other women.' This they understood. This they could cope with. But if you'd tell them, 'Daddy's gone fishing'—well kids just don't buy that jazz. It breaks them up. They think you're putting them on."

"Total abstinence was the only answer," Fred said. "That's why we formed Fishermen Anonymous. Instead of going fishing, we stayed home weekends and drank and played poker."

During its heyday, FA was a fellowship of men who shared their problems and tried to find answers. The only requirement for membership was a sincere desire to quit fishing.

There were no dues, although the hat was passed at meetings to take care of printed materials, postage, bar bills, and the phone answering service.

"The phone answering service was a great idea," Fred said. "Everytime you got an overwhelming urge to go fishing, you could call this number and get an inspirational message."

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F.A. MEETS
TONIGHT

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Fishermen Anonymous

"And if there was to be a poker game, drinking bout or a stag movie that night," Hank added, "you could learn about it on the phone."

At regular meetings, FA members participated in group therapy, listened to lectures, awarded prizes to those who had not fished, and issued stern reprimands to those who succumbed.

Of course, many FA members occasionally fell into a relapse, but they usually felt so guilty they were soon back at meetings to try to get straightened out.

"The first fishing trip is the one the reformed fisherman has to avoid," Fred said. "You never know when you'll be tempted to start again. Compulsive fishermen live from day to day."

Fred and Hank admit that they don't know why compulsive fishermen must fish.

"Unwillingness to face reality is a part of it," Hank said.

"Emotional insecurity, immaturity, and self-punishment are contributing factors," Fred added. "Subconsciously, fishermen want to punish themselves."

For compulsive fishermen, FA offered a helping hand, a chance to begin life anew. At one time, FA had over 80 members, and had plans to open regional chapters.

"It was working just great," Fred said. "Then we began to fall apart."

There were many types of fishermen in FA. Some fished for trout, some for bass, and others for walleyes, muskie, catfish or bluegills.

"We even had a couple ice fishermen," Hank added. "But they were too far gone to be helped. It was pitiful. They quit coming after the first meeting."

The trout fishermen were the next to break away. At meetings, they went off into a corner by themselves. They refused to speak to other members. Then they quit coming to meetings.

"The next thing we heard, they'd formed their own group," Hank said. "T.F.A.—Trout Fishermen Anonymous



AT TWO O'CLOCK FRED LEFT THE WHARTON HOTEL TO LOOK FOR IMOGENE



POKER GAMES PROVED THERAPEUTIC FOR COMPULSIVE FISHERMEN

—they called themselves. But it didn't last long. There were hard feelings between the dry fly and the wet fly fishermen. Pretty soon they split into D.F.T.F.A. and W.F.T.F.A."

Bass fishermen quickly followed. They broke away to form B.F.A. This in turn split into two groups—largemouth bass fishermen and smallmouth bass fishermen. Then they split again into popping bug and plug casting factions, and sub-division continued.

Today, Fred and Hank are all that remains of Fishermen Anonymous. They continue to meet weekends in the barroom at Wharton, preaching their gospel and trying to recruit new members.

"I talked to a guy just today who is thinking of signing up with us," Fred said. "He left a sick bird-dog at home to come up here fishing."

I noticed that Fred's wife, Imogene, had left the bar, leaving her drink half-emptied.

Then I noticed that my fly rod was also missing.

"Where's my fly rod?" I asked. "I left it right by the door."

"Imogene has probably gone for a walk along the creek," Fred said, "and taken your rod to use for a walking stick. I better go after her to make sure she doesn't trip on the rocks."

"At two o'clock in the morning!" I exclaimed.

Hank and I sat alone, sipping our Frescas.

"Sometimes I worry about those two," Hank sighed. "I better go along to make sure they don't get into trouble."

"Don't forget to take a fly rod to use for a walking stick," I called as he went out the door.

He paused, turned back as if to reply, but then shrugged and walked into the night.

Left to my thoughts, I found myself wondering if there might be a night hatch of Mayflies underway, and if my wife had had the baby yet.

MODERN CAMPING by DEL & LOIS KERR

CAMPING NEAR THE FABRIDAM

LAST JULY, DEDICATION ceremonies marked the opening for recreation of the long-heralded Fabridam on the Susquehana River at Sunbury. The dam was erected by the Pennsylvania Department of Forests and Waters.

A 3000-acre pool of water was created by this unique structure, designed by the Firestone Company and manufactured by Dupont. The dam is composed of an inflated fabric tube which stretches 2,100 feet across the Susquehanna River to provide a barrier eight feet tall. In flood periods it can be deflated to prevent overflowing of the banks.

The main purpose, however, is to supply a variety of water recreation opportunities in central Pennsylvania. The pool will offer boating, fishing and swimming. It extends up both branches of the river totalling 30 miles of shoreline.

It was impossible to build an earthen type of dam at Sunbury because of the rapid fluctuation in water at flood season.

The upper Susquehanna has long been acclaimed for its fine fishing and the new dam will certainly improve summer fishing with the deep water now provided. The river here has largemouth and smallmouth bass, walleye, bluegills, bullhead, catfish and suckers.

Campers wishing to view the new dam will find several campgrounds within easy driving distance. Probably the nearest is Winfield River Edge Camp Sites, a private campground located along the banks of the Susquehanna midway between Sunbury and Lewisburg on U.S. Route 15.

Campsites are comfortably large 38′ × 40′ each, some with electric and water hookups. A total of 75 sites are offered. Modern sanitary facilities including hot showers are provided.

Recreational facilities include fishing and swimming in the river at the campground. Lifeguarded swimming is available at Rolling Green Amusement Park, four miles from Winfield. The children's playground has swings, seesaws and basketball.

Besides fishing in the Susquehanna at the campground and at the fabridam the angler can also cast his line into Penn's Creek, six to eight miles from the campground and Middle Creek, ten miles away.

A small store on the premises handles ice, white gas, bread, milk and snacks.

Other private campgrounds are within easy driving distance of Sunbury. Knoebels Grove is 16 miles east of Sunbury on Route 487 at Elysburg. The campground is adjacent to an amusement park which has a modern swimming pool. Seventy-five sites are available, some open and some shaded. White gas and ice may be purchased at the campground.

Approximately 30 miles northwest of Sunbury is Woodward Cave, off Route 45 at Woodward. Woodward Cave is one of the largest limestone caverns in the Commonwealth and was first opened to the public in 1926. The campground offers overnight or weekly camping with 20 sites. Modern sanitary facilities are provided. Tours of the caverns are conducted. In much earlier times the cavern was the site of Indian ceremonials.

Also to the northwest, 16 miles from Lewisburg, is R. B. Winter State Park on Route 192.

The 580-acre park was formerly known as Halfway Dam State Park and was named after a former district forester in 1957. The original dam was built by a sawmill company. It was replaced in 1933 by the first stone masonry dam built by the Civilian Conservation Corps in the United States in 1933.

The dam forms a six-acre lake stocked with trout for fishing. Swimming is permitted but no boating.

Sixty campsites are located about 100 yards from the lake. The park offers fishing and swimming. The campground is very crowded weekends during the summer months.

Tourtist attractions in the vicinity of the fabridam include Fort Augusta, Fort and Museum, erected in 1756 in the early days of the French and Indian Wars. The fort, located in Sunbury, is open daily.

At Lewisburg the Union County Historical Society Museum houses many relics of days gone by.



"THANKS FOR PUSHING, HONEY. NOW WHY DON'T YOU CLEAN UP—GO JUMP IN THE LAKE. IT'S RIGHT OVER THERE!"



Notes FROM THE STREAMS

LATE DINNER!

■ I feel sorry for the Angler subscriber who receives only one copy a month. I returned home one evening for dinner to find that the twelve sample Anglers I get as a Waterways Patrolman had arrived. Seated at the dining room table was my wife, son and two neighbor boys—all reading the Angler. Needless to say dinner was late.—***Waterways Patrolman G. W. FRANK KANN*** (Sullivan and Lycoming Counties)

CHILD'S TOUCH

■ At a recent Fishing Derby of the Pioneer Sportsmen in Carbondale, that was set up as a "children's day," I noted the excellent fishing by the kids. White Oak Pond—the fishing site—has great numbers of floating bogs and the kids would fish in the holes in the bogs and come up with nice bullheads and some perch while the average adult would never think of fishing in such a tight place.—***Waterways Patrolman HARLAND F. REYNOLDS*** (Wayne County)

GOOD-TO-EAT BAIT!

■ While patrolling Oxbow Lake after stocking it with trout, I noticed a fisherman growling at his son for eating the bait. (Whole kernel corn). Another fisherman also saw this and apparently thinking the boy was hungry, offered the youngster some candy. He pushed this aside and dug into the can and finished the "bait."

The fisherman with the problems was Robert Appel of Tunkhannock and the hungry fisherman happened to be my 3 year old grandson, Robbie.—***Waterways Patrolman STEPHEN A. SHABBICK*** (Wyoming County)



"THESE DOUGHBALLS *ARE* TASTY, AREN'T THEY?"

PANTS, PLEASE—

■ While on patrol of the Allegheny River, below the Kinzua Dam in July, I saw a young boy about 10 years old step into a hole in the river. The water soon filled his boots and the current carried him downstream into even deeper water. I took a life saving device and swam out to where he could get a grip on it. Immediately a crowd gathered on the bank and advice was being shouted out by almost everyone. The boy, however, had his mind on a different problem and as I started him toward shore he whispered "Please mister don't take me in there—my pants just fell off." —***Waterways Patrolman GEORGE R. JONES*** (Warren County)

GOOD MEDICINE

■ I was approached last summer by a man who attended the fishing school held at the Emporium High School. After giving him some information for his vacation at Hills Creek Park, he told me of the good the course had done for his wife. Before taking up fishing this year she had been taking quite a few tranquilizers each day but since taking up the sport she not only caught some fish but was able to relax and do away with the medication. Maybe in this rush-rush society of today more people should throw away the medicine bottle and pick up the fishing pole.—***Waterways Patrolman STANLEY G. HASTINGS*** (Cameron County)

LOCKED AWAY

■ While on motorboat patrol of Pymatuning Reservoir, while making a routine inspection of boats, I observed a float boat with a child dangling her feet over the front rail into the water. I immediately stopped the boat and explained how dangerous this could be should the child slip overboard. She could easily be caught by the propeller before the motor could be stopped. Upon further inspecting the boat I discovered their life-saving devices were locked in the storage box and no one had a key. The operator then told his wife that if she had not let the child sit on the front he would not have been checked and no one would have discovered that they did not have their life-saving devices ready and accessible. Moral to the story—use good common sense when boating or it may cost one of your family's life.—***Waterways Patrolman WARREN L. BEAVER*** (West Crawford County)

FISHING VACATION

■ When Peter Paul and his wife from Aliquippa came to Potter County in April for 13 weeks vacation from the steel mills, he brought along his fly tying equipment and some necessary fishing tackle. He opened a little shop at his camp on Route 144 near Germania and, according to Peter, it was the best vacation he ever had! His wife learned to fly fish, the shop helped pay the expenses and he developed a good mail order business. Along with this Peter said he had ample time to fish and try his various patterns. He said it was the first time in his life that he ever enjoyed all the fishing he wanted. Only disappointment—he'll have to wait and wish for another five years for another long vacation.—***Waterways Patrolman KENNETH ALEY*** (Potter County)

ZIP CODE NUMBERS!

■ While on routine patrol of the Susquehanna River checking fishermen and boaters in the Millersburg area, I noticed a boat with an exceptional long number on the bow. After further inspection of the boat it was discovered that these numbers were quite expensive and the owner had done a fine job on placing them on the boat in superb letter form. After looking at this boat, No. PA-17048, I could not understand why so many numbers with no letter at the end. The owner swore up and down that this was the number that he was given by the license bureau in Harrisburg. Upon inspection of the owner's registration card, I discovered that he had not added a number and forgot to include a letter, but had simply copied his zip code on the bow instead of the registration number!—***Waterways Patrolman JOHN E. STEPANSKI*** (Dauphin County)

SLIMEY FISH

■ While on boat patrol at the Raystown Dam one afternoon Deputy Redline and I saw an elderly gentleman and his wife fishing from a boat. This in itself is nothing unusual, but the fact that the lady was wearing a blue rubber glove on her right hand caused us to wonder. We pulled alongside and inquired as to why the rubber glove and the lady informed us that her husband refused to bait her hook and she wasn't about to touch those slimey worms with her bare hands. We kiddingly asked what she used the spare left hand glove for and her husband piped up "That's what she uses to take those slimey fish off the hooks with." —***Waterways Patrolman JAMES T. VALENTINE*** (Huntingdon-Fulton Counties)

ALBINO SURPRISE!

■ Much excitement and interest was caused among area anglers last spring by the pre-season stocking which included palomino trout and albino brook trout with the regular shipments. One day I had just released a netfull of brook trout in the stream. There was one albino among these. An onlooker stepped a little closer and remarked that the fish was dead. I told him this was an albino brook trout and very much alive. The trout then moved upstream to the cover of a log. This fellow had been looking at the trout's back and thought it was belly up.—***Waterways Patrolman ANTHONY MURAWSKI*** (Cambria County)



". . . AND HONK ONCE IF SOMETHING BITES!"

JINXED?

■ Mr. George Weber, Park Superintendent of Tunkhannock State Park and his wife do quite a bit of fishing but it seems that George is a jinx. Everytime anyone goes with him nobody gets any fish. His wife is convinced that she has to go alone to catch fish. So this is what they did. George went his way and his wife went hers. Mrs. Weber reported in with a nice catch of bullheads. But poor old George could come up with nothing better than a bat he hooked on a dry fly.—***Waterways Patrolman ROBERT FASCHING*** (Lackawanna County)

MIDNIGHT PATROL

■ During one of our "Midnight Forays" while on patrol of an area of Philadelphia County for litterbugs, several Special Waterways Patrolmen and I encountered several of these types. One in particular was stopped about 2:30 A.M. while in the act of violating and was surprised to find our officers afield at this "Ungodly Hour," but was more surprised and I think completely confused when he encountered the same SFW at 6:30 the following morning. —***Waterways Patrolman FRANK SCHILLING*** (Philadelphia County)



A GUIDE FOR wildwater trips down the Youghiogheny River points upstream to group making a run through rapids (above) while a rubber raft used by some of those taking the trip floats smoothly along on a relatively "quiet" stretch of the river. Pittsburgh Press outdoor columnist Roger Latham is shown on the bow while Harry Allaman of WGAL in Lancaster sits ready with motion picture camera in stern. Others in photo not identified.

Youghiogheny River Ride

by
THAD BUKOWSKI



Although November is probably not the month to be trying it, the Youghiogheny River in Fayette County is fast becoming one of the most popular white water areas in the state for people looking for some exciting watersport.

The "Yough," as it is better known, flows through some beautiful country and at the same time offers kayak or canoe enthusiasts plenty of challenges. But the same white water that offers challenges to canoers can be enjoyed in the far more stable inflatable rafts —much safer for those who are inexperienced.

A group of Pennsylvania's outdoor writers and some Pennsylvania Fish Commission representatives made a trip down the "Yough" one weekend last summer with Indiana University instructor Ed Coleman who conducts trips down the river in his spare time. Pictures tell the best story . . .

PENNSYLVANIA FISH COMMISSION Region Two supervisor John Buck of Somerset leads the way into a rapid stretch of the river (above) with a junior member of the group while the group regroups for lunch after making the first leg of the run (below). One of the guides for the trip prepares a line prior to launching one of the enclosed canoes used for the trips (right).





WILD GINSENG--
MOST VALUABLE ROOT



EXPERIENCED 'SENG diggers know that the largest and oldest 'seng roots aren't always of the best quality. After they are about 30 years old many 'seng roots may start to deteriorate and become punky and even hollow. The best and firmest roots, called "prime finds," usually run from nine to 25 years old.

by WILBERT N. SAVAGE

THE STORY OF WILD GINSENG reads like a rousing frontier drama—a yesteryear account of keen rivalry, bonanza discoveries, incredible demand, rapscallion tradesmen; of lore and romance facets sparkling historically within one of the strangest multi-million-dollar commerce items on planet Earth.

Unfortunately it is also the disquieting but true story of a natural forest product that man still seeks with such dogged and foolhardy resolution that it continues to become scarcer—and recently more valuable—with each passing year.

Early in the eighteenth century no resident of the North American continent ever suspected that ginseng, a plain-looking relative of wild sarsaparilla, represented a vast woodland expanse of unclaimed root-crop wealth stretching from temperate eastern Canada to the Carolinas. But this situation of unawareness soon changed to hustle-bustle scenes of bedlam when a Canadian missionary working among Iroquois Indians discovered ginseng near Montreal in 1716. A small test shipment was sent to China—the world's demand center for ginseng. Acknowledgement was slow in coming but finally the word arrived: "Your specimen lot is, indeed, ginseng; and the quality grades out satisfactorily. . . ."

This simple message ignited a kind of stampede. Thousands of Canadians, including many Indians, took to the woods in quest of easy-to-dig "amber nuggets." A trading company was formed almost overnight. The export market was hungry for more and more *Panax* quinquefolium—American ginseng—and the cash buying price was 35¢ per pound.

The years rolled by and tons upon tons of ginseng roots were ripped from Canadian soil. Demand for the root grew greater, and so did greed among shrewd tradesmen who, unscrupulously, often received an average of ten to twelve times as much for ginseng as they paid uncomplaining diggers for it. When, finally, demand could scarcely be met, many 'seng shipments started to yield inferior roots—even force-dried ginseng that was visibly scorched. (Any kind of oven or other forced drying was strictly taboo). In 1752 this unprincipled practice all but killed the Canadian 'seng market. Chinese buyers were furious over the attempt to dupe them, and ginseng exports dropped from over $100,000 a year to $6,500.

The spark of demand for North American ginseng was to remain dim for a long time, but gradually a limited and exceedingly wary market started once again to open its doors—and the favorable focus was on the United States. Although George Washington wrote in his diary of the ginseng trade in 1784, and Daniel Boone sent a shipment of the valuable roots via Philadelphia in 1788, full recovery from the unfortunate Canadian incident required the healing powers of more than one hundred years!

As the spotlight of 'seng demand shifted south, Pennsylvania soon picked up the tempo of enthusiasm echoing down from New England and promptly enjoyed the distinction of supplying some of the finest and largest ginseng roots ever taken from the soil of this nation. In 1858, with

SOME 'SENG SIDELIGHTS

For a number of years ginseng shipments from this country to China averaged $808,00 in gold! Some lots of 'seng were shipped in barrels, each weighing 133⅓rd pounds. In China these hit auction highs of $6,500 per barrel for "a bright and clean selection of creamy-yellow roots. . . ."

To take ginseng out of China, or to send it out, was at one time punishable by death.

A few states, including Virginia and West Virginia, once had laws prohibiting ginseng from being taken before the fall ripening of seed berries. But the regulation was scoffed at and enforcement in the rugged mountains was so difficult that protection of the plant was abandoned.

While we do not now sell ginseng directly to Red China, we do have trade exchanges with countries who arrange a system of commercial dealings. Of course we have direct trade relations with Nationalist China.

Because spring-dug 'seng contains more moisture, it requires four to four and one-half pounds of green 'seng taken early to make a pound of dry roots. Later in the season, however, as little as three pounds of green 'seng will make a pound of dry.

Tricky 'seng diggers have been known to try to adulterate 'seng shipments with pokeweed and other roots. The inexperienced buyer may at times be fooled, but not the dealer who really knows his ginseng. 'Seng roots have also been "doctored" with thin slivers of lead and other weights to make them heavier. Sometimes, depending on how skillfully the insert was made and camouflaged, the deceptive scheme was difficult to detect. Of course artificial weight had to be added when 'seng was green and sometimes the drying process cracked the root and exposed the petty fraud.

No matter how well it grades out, Chinese buyers never rate American ginseng better than third class. The most valuable 'seng is of Mandarin origin and has been known to command the incredible price of one to four hundred dollars per ounce! All such 'seng treasures are packed in protective cotton for shipment —so as not to damage even one tiny hair-like root!

There is a superstition in China which still insists that ginseng has the power to protect itself by moving about underground and thus avoid all lurking perils that might harm it.

One of the largest American ginseng roots on record weighed twenty ounces and was estimated to be very close to one hundred years old.

trust in supply sources pretty well restored, more than 366,000 pounds of ginseng left this country bound for China—and Pennsylvania provided its share.

'Seng diggers in the States were more canny and drove hard bargains with traders for a fairer share of the real market price. Some families went on "ginseng frolics" and brought back cartloads of the valuable root. Those who didn't know how to recognize the plant soon learned.

By 1868 the market value of ginseng had doubled, and in that year over 370,000 pounds of U. S. 'seng reached Chinese buyers. Again, a considerable portion of the harvest was taken out of Penn's Woods. The price was even higher in 1878, and by 1888 it once again had multiplied itself by two. But by now the inevitable was beginning to happen in Pennsylvania as well as the whole 'seng "zone." Wild ginseng was becoming much more difficult to find. Even with the stimulation of higher prices, the year 1888 netted more than 112,000 pounds less than 1878; and in 1889, with prices still higher, export quantities took another sharp

continued on next page



STALK OF GINSENG with seed berries rising on stem at left of center leaves; also the plant's root and part of stem. Figures 1 and 2 show the plant's flower buds; 3 is the open blossom; 4 is the seed berries.



THIS IS the type of ginseng advertisement that appeared in outdoor magazines half a century ago. Even today one may still find ginseng buyers advertising in some modern outdoor magazines.

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WILD GINSENG-- MOST VALUABLE ROOT

drop. Already there was talk of raising cultivated ginseng, with a few actual experiments taking place.

The year 1896 saw the price of wild ginseng climb to $3.86 per pound, with only 199,000 pounds harvested. In 1901 the market value for average roots leaped to $5.38, but only 149,000 pounds could be collected for the eager Chinese market. In 1906 wild ginseng was worth $7.30 per pound, and already small quantities of cultivated roots, tagged as such, were being shipped—and accepted.

From that time on, more and more cultivated ginseng helped to fill demand for the root and wild ginseng steadily became less plentiful. It simply could not reproduce itself as rapidly as it was being dug, and increasingly remote and secluded were the areas where searches for wild ginseng were recklessly carried out. Could a good thing—a wondrous gift of Nature—be slipping beyond the brink of recovery? An affirmative caution-signal answer was boldly written on the wall, but few paused to read it, and fewer chose to heed it.

The horn of plenty had spoiled many a 'seng digger, and now he seemed bewildered by the fact that where he once was able to find a bushel of roots his tedious search was now rewarded by a handful of scrawny 'seng. The death-knell for worthwhile quantities of wild 'seng was ringing; but, curiously, the very circumstance of this plight did one thing to give the root a temporary reprieve: the scarcity of wild 'seng actually caused many devoted and skillful diggers to give up hunting the woodland plant entirely. This was because a considerable number of 'seng hunters expected to, and did, earn a fair average wage by engaging in digging ginseng as a sole occupation.

By 1923 the market value of wild ginseng was $15.00 per pound. Top grade large roots were bringing an even better price. But even with cultivated 'seng included, U. S. exports that year totaled only 148,000 pounds. Fondly, but perhaps not ruefully, veteran 'seng diggers were now remembering the days when country school children could fill their dinner pails with two or three pounds of green 'seng roots on their woods-path way home from school. They were also thinking of the time when an adult could dig all day in a single huge patch of ginseng that often presented the plant's red berries in a captivating fall scene of forest-shaded splendor.

While root size and weight were highly important to the hey-day 'seng hunter, experienced diggers knew that it was the shape of the root that really counts in the eyes of Chinese buyers. Here's why:

The word "ginseng" means in Chinese "man form" or "likeness of man." Very early Chinese literature tells of the remarkable virtues of ginseng roots that bear some trace of resemblance to the human figure. That belief still survives, undiminished. Straight roots are, of course, good roots. But they are prosaic second raters when compared with a root with forks that extend, thigh-like, or arm-like, from the main part of the root. If a really grotesque find turns up, having both "arms" and "legs," plus a bulbous head-like formation at the top, only the wealthy can afford to ponder its price tag. Such roots commonly retail in China for $200 each, and exceptional ones bring much more. Of course the sale of these prizes is reserved for tradesmen in the Oriental marketplaces, with exporters rarely getting more than a token bonus for uncommon root specimens.

As might be expected, 'seng roots with leg-like forks are used to treat leg ailments; arm-like root projections are relied upon to restore vigor to ailing arms; the rounded upper portion of a root is believed to possess special powers over all head troubles. With all parts intact, almost any odd-shaped root is supposed to establish good health through use as a talisman.

Generally, however, ginseng is taken inwardly in some manner by the Chinese. It is made into pills, powder, and cold brew. Sometimes it shows up as a condiment; and sometimes a little pulverized 'seng is carried in a small pouch for occasional "dusting of the tongue." It is made into hot tea, too, and a kind of confection is sometimes prepared by combining ground 'seng with honey and sugar. Very often it is chewed sparingly, and may even be smoked, gargled, or sprinkled in the hair. It has been rubbed on wounds, carried between the toes of troublesome feet, and made into ointment for stiff joints.

Although the Chinese may be thoroughly puzzled by American attitudes toward the magic powers of ginseng,

experts in pharmacology have repeatedly defined its medicinal potential as little more than picayune. At least one old-time "doctor-book" did say that ginseng tea would "encourage the appetite and strengthen digestion; and also serve as a mild nerve tonic and diuretic. . . ."

It is indeed difficult today to find a veteran 'seng digger who engaged in quantity root harvests some 60 years ago —or roughly in the early 1900's. But the author was fortunate during the summer of 1969 when he located such a senior individual in a rural section near Ohiopyle, Fayette County. His name: Mr. Albert Burnworth.

"Most people who know the stuff and who have dug it call it ''sang'—and that includes me," explained the amiable countryman after we were comfortably seated on his well-shaded front porch. "Almost everywhere hereabouts 'sang was beginning to show the effects of over-digging when I was a boy. But there were some nice patches to be found from time to time. I had no idea what the Chinese people did with 'sang. I just knew that it could buy the things that people needed. In many families both girls and boys



ALBERT BURNWORTH who lives near Ohiopyle recalls the days of "sang'n."

learned early to distinguish 'sang from other woods plants. Taken to a local country storekeeper the roots could be exchanged for school clothes and household needs. Shipped to the big buyers it brought money that made dreams come true. Many a boy got his first fishing tackle and his first gun and pocket watch with 'sang money."

Asked if he could think of just one old-timer who had done a great deal of 'seng digging, Mr. Burnworth replied: "Not one. They're all gone, almost like the 'sang is gone. But there were some good 'sang diggers in this locality. This rich Youghiogheny watershed produced some big old 'sang roots; but personally I can't tell of digging any extremely large roots, the biggest being just a fraction under half a pound and it was shaped like a parsnip. I reckon maybe the tales of some 'sang roots are like a few of the stories about big fish—stretched a bit. And that reminds me that it wasn't uncommon for 'sang diggers of my day to get in some fishing while on a root-hunting jaunt. In fact I had line and hooks with me a good part of the time when I was 'sanging.

"I have dug hundreds of pounds of 'sang and always found the north slopes best suited to its growth. 'Sang likes cold weather and high elevations and it almost never freezes out. I usually aimed to do most of my 'sanging in the fall when the 'sang berries were ripe; and all that I found I'd plant in hard-to-get-to places along the slopes of steep hollows and the like.

"I think that 'sang was struck the biggest blow during the Depression Years. A lot of country people scoured the hills for it and in a way you couldn't blame them. A pound of dry 'sang would buy a nice lot of groceries for a hungry family, or pay a doctor or buy lots of clothes; and two pounds would buy a good cow. But it's sad to think of wild 'sang being just about a thing of the past. Scarcity always does wild things to prices and I guess that's why 'sang is now fetching about forty-two dollars a pound. I know of a couple of nice stalks of wild 'sang in a hard-to-find nook. Some of my memories make them almost sacred, so for now I guess their whereabouts will have to be my secret. . . ."

Wild ginseng grows to a maximum height of about twenty inches. Its leaves are bright green in summer, turning yellow in early autumn, and are egg-shaped with a saw-tooth margin. They end in an abrupt point, and range in number from three on a first-year plant to twenty or more on an old plant. A stalk of 'seng eight or ten years old may have four or more leaf-stalks branching out from the pencil-size main stem. Each branch almost always has exactly five leaves. A slender flower stem pops up from the center of the plant and puts out a lacy chartreuse bloom in early July. Small green berries soon replace the bloom, and these mature in late August and ripen into bright red seed berries during the last part of September. Each berry contains in its fleshy case from one to three seeds, usually two. Even the largest stalks of wild ginseng seldom produce more than twenty to thirty seed berries—never more than fifty—and only a few of these can be expected to survive and germinate since certain birds are fond of them, as are mice and chipmunks.

Since ginseng can reproduce itself only from seed, all spring and summer-dug 'seng represented an incalculable waste. Rarely giving a thought to tomorrow, ginseng by the wagonload was dug before the berries could ripen and drop and thus initiate Nature's renewal process. No one knows how many potential tons of 'seng were lost by reason of this unwise practice; but it is known that a kind of "get-it-while-you-can" covetousness existed far and wide among ginseng diggers. Even the spindly immature roots seldom were spared, and this furthered the certainty of a near-complete eradication onslaught.

Once a ginseng root is established and left undisturbed it almost always puts up an annual stalk. On occasion, however—and this habit is something of a mystery—a root will "rest" for one season and resume growth the following year. The root crown or "neck" takes on a scar each fall when the stem dies and drops off. From these scars or rings one can arrive at the root's age. Of course there's no way to work out a plus for the root's tricky seasons of dormancy, if any.

continued on next page

Big Rain Creates HOT SPOT

by Edward T. Gray

DURING A STORM Friday and Saturday, July 4th and 5th, an unusual amount of rain sent lakes and streams bank full and springs flowing in full force.

The volume of water flowing over Pymatuning Spillway at Linesville, brought walleyes and other game fish in around the spillway in great numbers—as is a natural occurrence in the months of April and May—but this July flow of high water created a fishing "hot spot" for tourist and local fishermen. For at least a week or two these feeding fish were hitting everything the fishermen would offer them, nightcrawlers, minnows, spinners, plugs, jigs, and other lures.



SPECTATORS lined shoreline too, in order to watch all the fishing action. Many left and soon came back with fishing equipment.



LUCKY ANGLER Jerry Everett of Swissvale hauls out stringer of big walleyes (above) while Henry Ammon of McKeesport (below) holds seven nice walleyes.



continued from previous page

MOST VALUABLE ROOT



Suitable soil and climate conditions for the growth of wild ginseng extend from Canada to the Carolinas and west to the first tier of states beyond the Mississippi. It seems to prefer soil which favors the growth of butternut, beech, dogwood, poplar, basswood, cucumber, maple, and some of the hardwoods. It must have abundant shade to survive and flourish. Although it does well in the coolness of higher elevations, particularly where there is an abundance of leaf mold, it appears to seek the mid- to lower portions of hillsides rather than bleak ridges. But no matter where his search begins, and even if he is seeking only to study the plant's special environment and growth tendencies, the 'seng hunter of today is apt to find the objects of his quest few and far between. Indeed, an expert in the art of finding wild ginseng may travel all day in traditioanl 'seng country and never spot a single stalk!

Such is the haunting account of the rise and fall of America's wild root bonanza. Such is the unfortunate manner in which man became the Nemesis of an innocent little woodland plant. Such was the casting of the shadow of doom and the writing of the *finis* line for the world's royal gem of all roots.

Now that we are starting to explore other worlds in the Universe, let us hope that we will permanently adopt an improved behavior posture, and that he will muster enough backbone to accord the natural resources of other planets a more commendable and rational attitude; that he will replace his active greed and waste habits with zealous application of the utmost in responsible administrative metering of the things Nature has provided for common-sense use, *not abuse* and the inevitable consequence spelled r-u-i-n.

easy way TO BEST EATING

by Keith Schuyler

THE ARGUMENT RAGES, but there is a substantial number who believe the walleye is the best eating of all fresh-water fish. In any event, to get the best eating from the walleye, filleting ensures bone-free, sweet flesh to please the palate of the most discriminating.

Accompanying photos, taken on location, after a good go at walleyes, illustrate how to separate the succulent slabs of good eating from the inedible parts of the fish. This system works equally well with other stiff-spined, tough-scaled fish such as perch and bass. Properly done, it wastes practically none of the available flesh.

Rolled in flour or meal, or as is, the fillets should be fried in bubbling hot butter so that they brown quickly and stay firm and flaky. They go very well with . . . well, with anything!



A PAIR of 20-inchish walleyes—nice filleting size and just enough for two hungry diners.



TAKE first cut close in on both sides behind pectoral fin, deep, to backbone and throat.



INSERT knife at juncture of two previous cuts, and slice slab of belly all the way back, taking pelvic fins, vent and anal fin as shown.



GRASP head in one hand, body in other, and pull. Entrails and belly slab stay with head; discard.



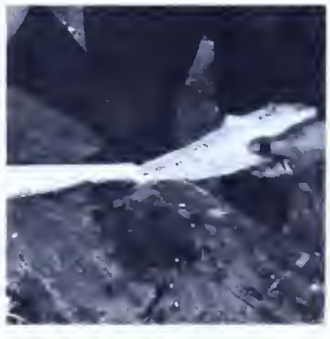
MAKE careful slit from front down each side of spiny dorsal fin; then extend shallow cut all the way to tail, or caudal fin.



TURN fish belly up and cut through remaining skin to tail.



GRASP front of skin (with scales still on) as shown . . .



. . . THEN strip skin away from flesh in one easy pull.



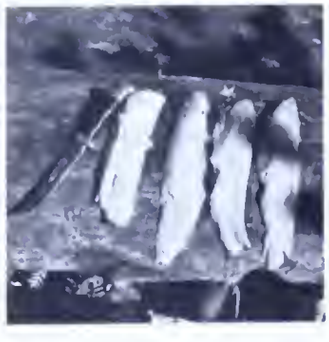
WITH both skin strips still attached, start forward cut under flesh just ahead of caudal fin.



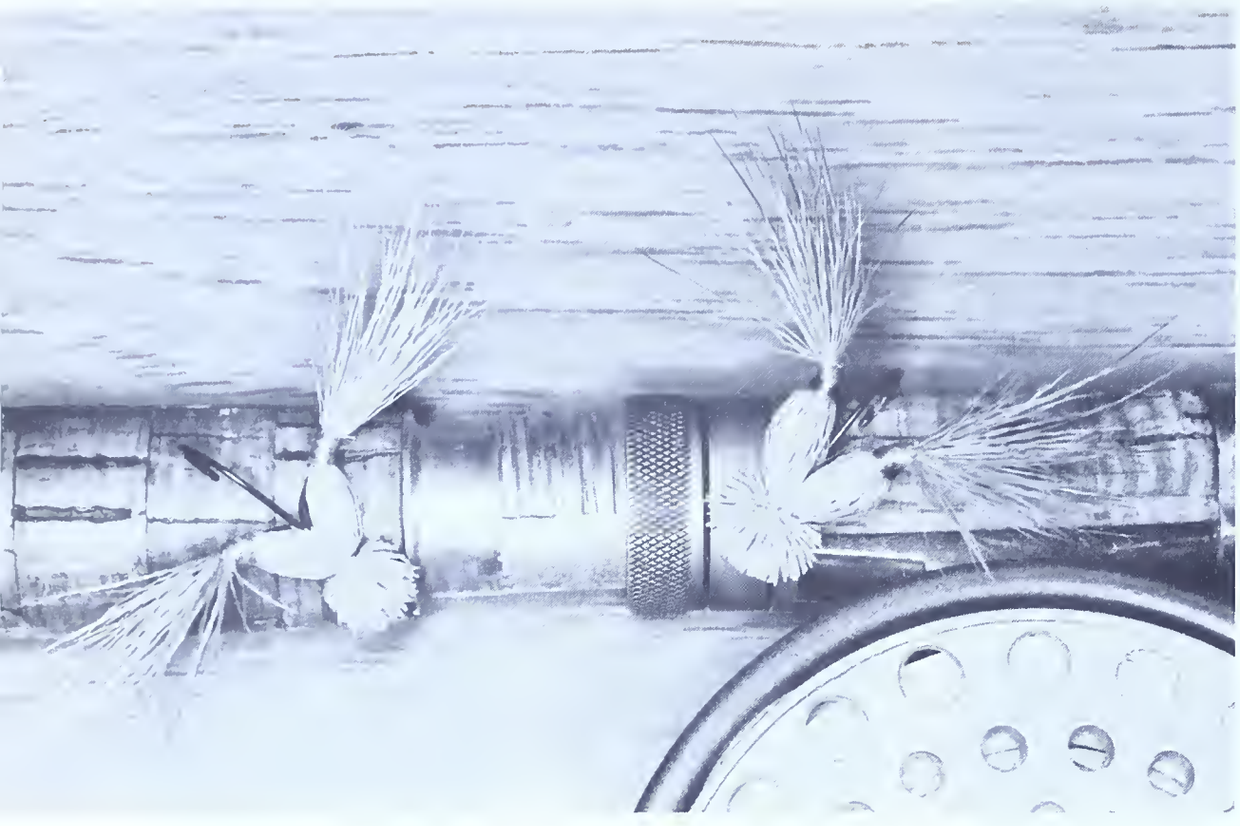
WORK knife forward at an angle, feeling your way against the rib cage from top center down along side.



AFTER you have removed two fillets, you have entire skin and skeleton in one piece for discarding.



YOU ARE now one step away from certainly some of the best eating that ever came from fresh water.



FINISHED HAIR FROGS—ready to catch bass!

TYING A SIMPLIFIED Hair Frog

by Chauncy K. Lively

ASK ANY VETERAN BASS-BUGGER to name his favorite three bugs and almost invariably a frog imitation of some sort will be among them. They seem to hold a particular attraction for big bass and that's about the most valid reason you'll find for popularity.

Frog bugs are many and varied but possibly the most artistic of them all is the Messinger Hair Frog, tied in former years by Joe Messinger of Morgantown, W. Va. Old timers will remember these little masterpieces and the few still around are cherished by their owners like rare coins. Messinger's Frog has jointed legs which kick when retrieved, an exquisitely trimmed body of spun deer hair, and protruding eyes. Its likeness to a real frog is startling; one almost expects it to jump right out of the fly box.

The hair frog we are going to tie this month is not the Messinger Frog, for few fly dressers can accurately duplicate it, but we are going to combine in a general way Messinger' method of leg construction with a simplified tying method. The result is a bug even beginners can tie without difficulty if the directions are closely followed.

The deer body hair we are going to use should be as coarse as we can find, almost straw-like in texture. Thin hair does not flare properly under pressure of the thread, nor does it float as well as coarse, hollow hair. The maximum size of the frog is determined by the length of the hair; for the size #4 frog illustrated, hair of about two inches long is about right. Much of the hook shank is exposed, placing the point well back and in position for good hooking. Too, the weight of the bend, the hook's heaviest area, allows the frog to rest in the water with its legs slightly submerged while the head portion floats. This is a live frog's natural position in the water.

Each of the hair legs is made separately and the two are combined on the hook to form body and legs. A length of medium weight (10 to 15 pound test) braided casting line is enclosed within each bunch of hair to serve as stabilizers, enabling the tyer to position the legs in any angle desired. The stabilizers also permit adjustment in size of the thighs, the frog's muscular upper legs.

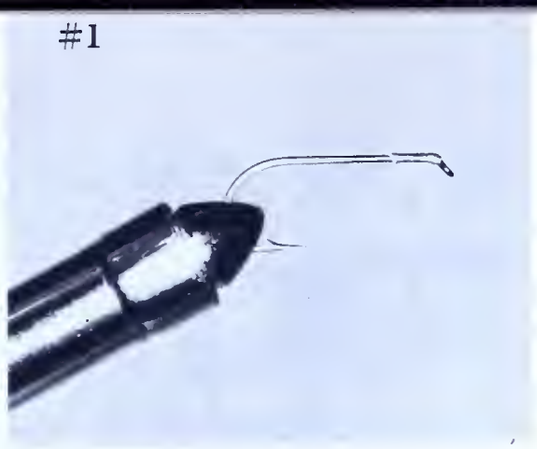
It is difficult to describe the required thickness of a bunch of deer hair because specifying a "medium-sized" or "large" bunch is rather vague and inexplicit without definite guidelines. So, for the sake of uniformity, twist a bunch of hair to separate it from the adjacent hair on the hide. Make sure you grasp the hair near its base, next to the hide. Now flatten the twisted bunch and measure it across its width. If the flattened bunch is ⅜″ to ½″ wide it's what I would call "medium-size," and just right for each of the two bunches we'll use.

After completing the frog, test its kick by stroking the legs. If they appear to be stiff, cut a few hairs from the inside of the thighs, between the knee and the hook. There should be enough springiness in the thighs, where they are joined, to allow a good kicking action when the frog is retrieved with sharp twitches of the rod tip.

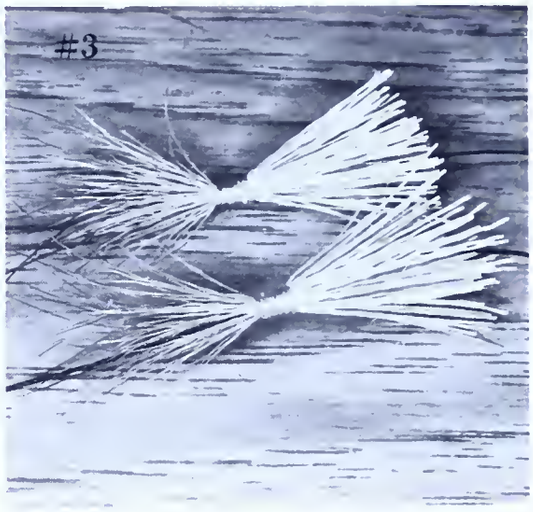
I first baptised the frog in a Crawford County lake two years ago. Fishing it in the openings among the lily pads, it produced some fine largemouth bass. And as an added bonus it even lured a couple of northerns out of the weeds. The frog works equally well for river smallmouth when these roustabouts are mayhem-bent in shallow water. Try it in yellow and/or pale green; it's a good idea to have both colors in your kit.

HAIR FROG

1. Fasten a size #4 (regular shank) hook in the vise. Tie in heavy tying thread behind eye and wind closely toward bend to about ⅓ length of shank. Half-hitch.
2. Cut a medium-size bunch of deer body hair (yellow or pale green) from the hide. Roll hair around a 5" length of 10–15 lb. braided casting line. With a separate length of thread (of color to match hair) make a close winding about ¼" long around middle of hair bunch. Half-hitch or whip finish to tie off winding. Repeat this procedure with a second bunch of hair.
3. The two bunches of hair, with windings, should be as nearly alike as possible in size and proportion. Stabilizers of casting line protrude from ends of hair.
4. Cut a ⅜" length from the pointed ends of two straight household pins. With pliers insert pin ends inside both thread windings.
5. Grasp both bunches together near butts of hair. Ends of hair should be evenly matched.
6. Holding hair firmly on hook with left hand, bind hair to hook with two tight turns of thread, causing butts to flare. Half-hitch.
7. Hold hair butts out of the way and spiral thread forward, binding stabilizers to hook behind eye. Trim off excess stabilizer lines as shown. Whip finish tying thread.
8. Trim flared hair to a broad, rounded shape.
9. Remove frog from vise. With pliers, bend knee joint to desired angle. Wire inside winding retains shape of knee. Cut off stabilizer lines below joint.
10. Place frog in vise upside down. With bodkin point, liberally apply hard-drying cement (Duco, Ambroid or similar type) to underside of hair and hook near eye. This prevents hair from rolling around hook. Also apply cement to windings at knee joints.

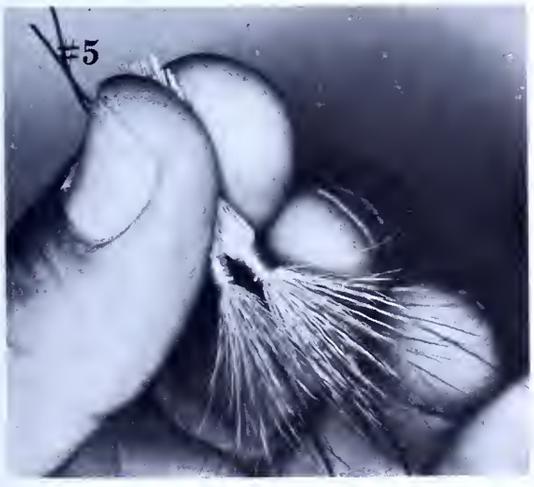








NEXT MONTH—Damselfly Nymphs!













THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

LITTER CLEANUP

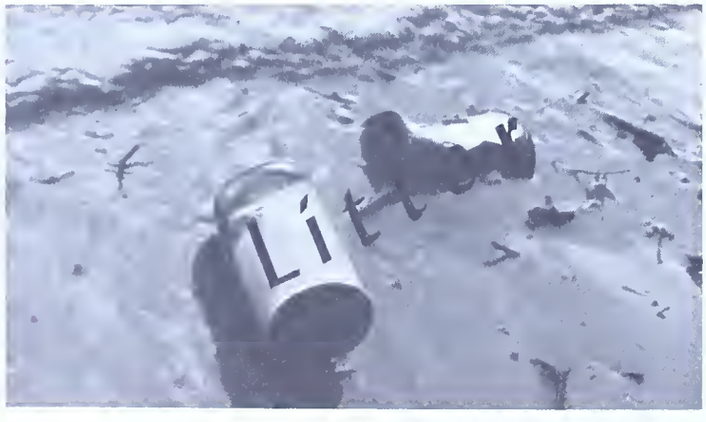
Faced with a waterway litter problem?

Then number each piece of debris and give prizes to holders of the lucky numbers.

No kidding, this is being done to clean up the Youghiogheny River reservoir, in southwestern Pennsylvania, and it's becoming an annual event.

The Yough's clean-up program began during the fall of 1967 under the direction of the U. S. Army Corps of Engineers with the cooperation of the various boating clubs such as the Castaway Yacht Club, Somerfield Beach, Lakeside Marine Mart and others.

This year's campaign, a month long event, was kicked off on June 1 with a gala, giant boat parade featuring decorated boats, a reviewing stand and judges. Burl B. McVicker, reservoir manager, was parade marshal; and Congressman J. Irving Whalley, of the 12th Congressional District, and Col. Wayne S. Nichols, Corps of Engineers, were the guest speakers.



After all the formalities, trophies were provided by Capt. and Mrs. Jack Cornish and by Mr. and Mrs. John Snyder, of the Castaway Yacht Club, and awarded to the winners of the most original, most humorous and most attractive boats.

Here's how the clean-up campaign was conducted.

As McVicker explained it metal tags, each bearing a number, were attached to just about every piece of debris found on and around the reservoir. This ranged from an empty beer can to a king sized tree trunk.

The items were carried or towed to the parking lot at Somerfield where an official examined the tags to determine if they bore a lucky number.

If they did, the boater received one of the many prizes donated by local business places; and if they didn't at least the debris was where it belonged in the first place—on the scrap pile.

After the campaign was over anything that would not burn was hauled away by the Corps of Engineers. After everything had gone up in smoke, the boaters were treated to a boat-in movie at the Castaway Yacht Club dock.

What does all this add up to?

Some 2,968 used oil drums and tons of other debris, including old boat docks and logs, removed from the reservoir since 1967; and it is estimated that at least another 200 drums would be removed from the reservoir this fall by the Corps of Engineers.

In fact, John Snyder, of Somerfield Beach, removed 110 used drums and the Laurel Yacht Club took 88 drums from the reservoir this year alone.

This project serves as a prime example of what can be done, under proper supervision, by the individual pleasure boaters and boat clubs to help clean up the waterways of Pennsylvania.

Just how serious is the litter problem?

Keep America Beautiful Inc. informs us that it costs U. S. taxpayers $500 million annually to remove litter from streets, highways, parks, beaches and other public property; and that $15.5 million was spent in one year to clean up and maintain national recreational facilities and sites administered by the U. S. Forest Service.

Litter and trash thrown in streams and lakes lowers the quality of the environment, it harms fish and plant life, and was responsible for the closing of fishing waters and hunting grounds in ten states.

A small pamphlet entitled, "Litter Prevention . . . An Aid To Conservation," distributed by Keep America Beautiful Inc., lists the following points to be posted at boathouses and marinas:

1. Observe all Federal, State and local sanitation laws governing waterways.
2. Carry a litterbag in your boat and bring it back to port for disposal on shore.
3. Keep docks and piers litter-free.
4. Clean up picnic and camp sites near waterways so trash will not be blown or washed into the water.
5. Report cases of stream pollution to the proper authorities.

SURVEY SHOWS MANY BOATERS FISH

ALMOST 60 PERCENT of the boats registered in Pennsylvania are used primarily for fishing, according to results of a boat owner survey released recently by the Pennsylvania Fish Commission.

The survey consisted of a questionnaire card mailed early this year to 94,400 Pennsylvania boaters at the same time they received their 1969 boat registration renewal applications. More than 61,500 questionnaires were returned, with 36,421 (59.1%) of the boat owners listing fishing as the primary use of their boats. Cruising was the next highest use, with 15,291 owners (24%) saying this was the primary use. Almost 8,000 owners (13%) claimed their boats were used mostly in connection with water skiing, while another 229 persons (.37%) reported their boats were used mostly for hunting purposes.

Pennsylvania boaters also indicated a preference for small outboard motors. A total of 22,367 (42.5%) of the boaters responding reported they use 1 to 9 horsepower outboards, 12,548 (23.8%) said they use 25 to 50 horsepower outboard engines, 5,510 (10.5%) use 10–24 horsepower outboards, 5,450 (10.4%) use 51–75 horsepower engines, 3,051 (5.8%) use 76–100 horsepower, and 3,430 (6.5%) use outboards of over 100 horsepower.

One of the most significant findings from the survey was that only 14,232 (23.1%) of the 61,500 boat owners replying claimed to have taken any boating safety training such as the courses conducted each year by the Pennsylvania Fish Commission, U. S. Power Squadron, U. S. Coast Guard Auxiliary, and American Red Cross.

The 1969 boating survey confirms findings made in a similar survey conducted in 1966 by the Pennsylvania State University for the Commission. The earlier study showed a typical Pennsylvania boater owns a small boat, a single outboard motor of low horsepower, and spends a large proportion of his boating time in fishing.

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continued from page 7

We Came Back-

passing through a loop in the monofilament line, held the jig—during cold weather, you must be very careful how you tie a jig on a monofilament line, for these lines, when cold, have a tendency to actually UNWRAP themselves and untie the knot all by themselves—then, with a quick whip of the rod, I sailed the jig far out into the slow-moving eddy water which was now being lightly flecked with wet snow.

I had given the jig only one bounce when it came up against a solid wall. It couldn't be a rock, as rocks don't move sidewise. Swifter, down the river, then a wide swing up river. My blood which had been running sluggish and cold ever since the day before, started to warm up, quickly stoked by the adrenalin now pouring fuel to the fires. Up river, then down, with the line silently Veeing through the water. I still had no inkling what the fish might be. As the line came in, with the drag clicking every so often as the fish moved out, I knew I had to hold it away from the big clump of willows and root shoots which were right alongside me in about a foot of water. But the fish made it easy. I held the net in the water at arm's length and the fish swam right smack into the net. A beautiful walleye, and as I tossed it back onto the matted brown dead grass along the shore and measured all of its twenty eight inches, I swear by my best BRUTE STICK rod that the fish had a wide smile on its face, a smile every bit as smirky as those the porpoise get—a smile which said as plain as could be "see . . . no cameras today . . . see what happens!"

I unhooked the jig, tied the walleye to a nearby tree root on a stringer, gave a short but warm kiss of thanks to the patriotic jig, and walked back into the river. And once again, I sailed the jig way, way out towards the middle of the eddy. It no sooner hit the water than it was snapped up and this time, the setting of the hook brought a fast run up the river. Seconds later, a big BIG musky came out of that water as smoothly as if he were jet propelled—a musky which would have gone at least forty inches long. His next run took him to the foot of a small island, a point of land where two sections of the river met to form the eddy. I knew that twenty or thirty feet off the point of this island lay a huge log, actually a tree which had probably floated down the river some years before, and which had become lodged in rocks at the start of the eddy. It would certainly have taken a large crane to have lifted this log, so heavily was it weighted down with hundreds of jigs which stuck into its branches before the casters broke off their lines. I tried to lead that musky away from this submerged tree, but he was un-leadable. He swam, doggedly, up river and soon I saw my line pointing right behind where I knew the tree was located. Suddenly the line came up tight as a fiddle string before it snapped, twisted around tree limbs and branches along with all that other tackle miscellany snagged onto the underwater nemesis.

Now it was my turn to smile . . . a smile equalling that of the walleye I had just landed. A smile—a dogged smile, whenever I lose a good fish. Sure, I'm disappointed, but I think a smart adversary deserves a smile as a pat on the back whenever he winds up the winner. And with that smile, the words I had swallowed the day before disappeared and my mouth tasted clean, for I knew that the river would keep producing its big fish.

SEA BAGS DISTRIBUTED



Pennsylvania boaters are being encouraged by the Penn. Fish Commission to bring their trash back while enjoying the waterways. The Commission distributed late last summer several thousand plastic "Sea Bags."

Shown to the left with a Sea Bag at the time they were unveiled are Pennsylvania Representatives Reid L. Bennett (D-Mercer) and John F. Laudadio, (D-Westmoreland).

ACCIDENT REPORT

BY - ED JONES
Chief Marine Education Specialist
Pennsylvania Fish Commission

RECENTLY AN ACCIDENT REPORT was received concerning an explosion aboard a pleasure craft. The owner/operator stated in his report that when he went aboard his boat to start his boating day, he smelled gasoline fumes.

In spite of this the operator tried to start his engine. Nothing happened! He waited a minute or two and tried again. "WHAM! ! !"—Three stunned, surprised people were in the water. Luckily no one was seriously hurt. All three could easily have been killed instantly or burned and maimed for life.

Anyone capable of operating a boat should certainly know that if gasoline fumes exist, the last thing to do is hit the starter button. Gasoline vapor in a confined area is one of the most explosive materials known.

In the Coast Guard Pamphlet on Ventilation Systems for Small Craft, (CG 395), it states "a cup of gasoline in the bilges has the potential power of 15 sticks of dynamite!" And if one cup of gasoline has the explosive power of 15 sticks of dynamite what do you suppose you've got when you are sitting on 12 gallons or even 50 gallons of gasoline? Have you ever seen a gasoline explosion, a boat that has burned to the waterline or tried to render first aid to someone with 2nd and 3rd degree burns over 80 or 90% of their body?

Check all compartments on your boat capable of trapping gasoline fumes. Even if your boat is an outboard of open construction you still could have places for fumes to gather, say under the floor boards.

For safety's sake never start your boat if you smell fumes. Check the boat from stem to stern till you are positive all is shipshape. And a reminder for boaters with Blower Systems. Five minutes is not too long to run your blowers before starting that engine!

BILL SIGNED - -



SIGNING OF SENATE BILL 10—

GOVERNOR RAYMOND P. SHAFER is shown here signing into law a major piece of conservation legislation —Senate Bill 10—to improve Pennsylvania's waterways for boating and recreational purposes.

The bill will permit the Fish Commission to use liquid fuels revenue for improvement of waterways. The amount of revenue available is limited to the tax paid by boaters on the fuel they use for operating their craft.

In signing the legislation the governor said:

"My Administration has advocated the passage of this kind of legislation since coming into office. I am proud that it has become a reality because it will provide another important step in our efforts to make Pennsylvania one of the Nation's best and most attractive recreation and conservation states.

"Pleasure boating has become one of the fastest growing outdoor sports in Pennsylvania and America. This legislation recognizes that fact. It also recognizes the need to improve our waterways for the safety of our boaters and fishermen.

"Enactment of this legislation resulted from the bipartisan efforts of members of the General Assembly and representatives of Pennsylvania's outstanding conservation organizations."

The new funds will be used to purchase, develop and maintain marinas and other boating access areas for the construction and replacement of navigational aids; for the publication of nautical charts, for patrolling waterways to protect and assist boaters, and for educating the citizens about safe boating practices.

It is estimated that $750,000 annually will be available as a result of the new law.

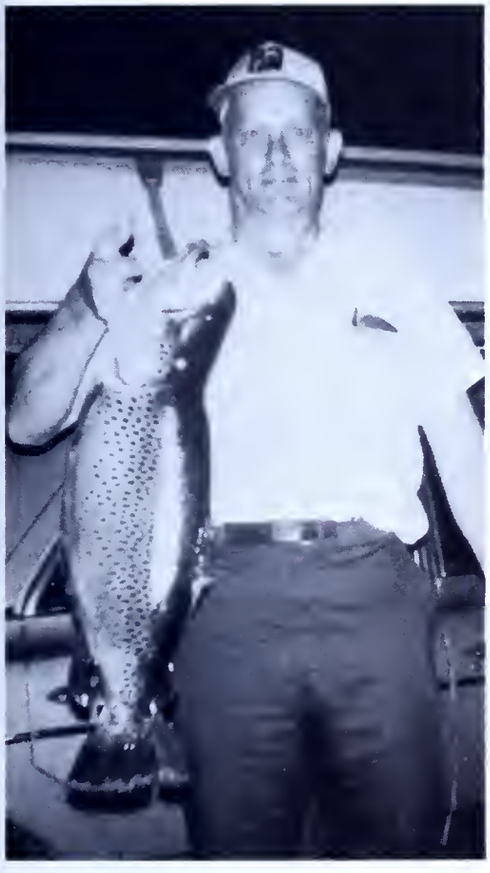
CHRISTMAS SUBSCRIPTIONS

Readers wishing to subscribe to the Pennsylvania Angler as a Christmas gift for friends should fill out the card included in this issue of the magazine and return it as soon as possible in order to insure early inclusion of the gift recipient on our mailing list.

Production scheduling usually means a one or two month delay from the time a subscription is received until the subscriber can first be included on the mailing list so "early shopping" is a must when it comes to purchasing subscriptions as gifts!

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



FISHERMAN John LeBahn of Dunmore holds a 27 in., 11½ lb. brown trout he caught while fishing Upper Woods Pond late in June. It took a nightcrawler.



LAWRENCE GROVE, 15, of Kingston holds a 22½ in. rainbow trout he caught while fishing with worms in Bowmans Creek in Wyoming County.



CHARLOTTE GEARHART of Sharpsville holds 28 in., 7¼ lb. walleye she caught on a worm while fishing at Pymatuning.



BIG BROWN TROUT was caught by Nanticoke fisherman Michael Sunday while fishing Huntington Creek in Lycoming County. It measured 25½ in., weighed 7¾ lbs., and took a minnow.



PETER KEMPINSKI of Shickshinny holds 21 in., 6 lb. largemouth bass he caught while fishing Stillwater Lake in Monroe County. The 13-year-old angler was using a Jitterbug.



ANGLER GEORGE ALTEMUS of Levittown holds large brook trout he landed while fishing the Big Bushkill. It measured 20 in., weighed 3 lbs., 8 ozs. and took a black ghost streamer.

FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN



PITTSBURGH ANGLER A. Bukovitz holds 24½ in., 6½ lb. catfish he caught while fishing Pymatuning Lake.



BILL LISAK of Scranton holds 21 in., 3¼ lb. largemouth bass he caught while fishing Lake Wallenpaupack.



MRS. DOLORES BUCHSEN of Coundersport and daughter Kim with a 21½ in., rainbow mother caught in Lyman Run.



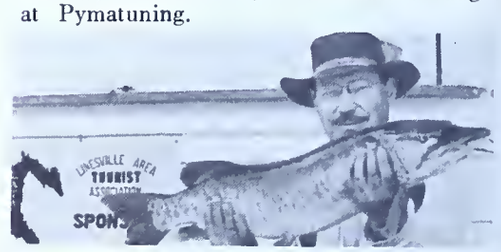




TEN-YEAR-OLD Ronald Wyrich of North East (left) holds 19 in., 3½ lb. largemouth he caught at Eaton Dam on a worm while Edward Most Jr. of Pittsburgh (center) holds 6 brown and rainbow trout he caught at Canonsburg Lake in Washington County on Salmon eggs. Russell Greene, 12, of Jersey Shore (right) holds 18¾ in., 3¼ lb. brown trout he took while fishing Kettle Creek in Potter County on a minnow.



DANNY PFEIL, 12, of Lake City (above) holds 25½ in., 8½ lb. catfish caught from Elk Creek while Tom Wehner of Sewickely (below) holds 35 in., 11 lb. muskie caught at Pymatuning.





LUZERNE COUNTY Waterways Patrolman Ed Manhart's wife Sarah holds 34 in., carp she took while they were fishing at Lake Wallenpaupack.



FOURTEEN-YEAR-OLD Gerald Gumble of Paupack holds the 21 in., rainbow he caught while fishing Kellam Brook in Pike County. It won him a Pennsylvania Angler Junior Fishing Citation.



CHARLES SWANK of Shamokin Dam holds 21¼ in., 3 lb., 15 oz. smallmouth bass he caught from the Susquehanna River in Northumberland County.



SONS BOB AND DICK hold 10 to 14 in. largemouth bass caught by Dad Thomas Pheiffer from Lehigh River. David Cherven (12) of Elco (right) holds 32 in., 9 lb., 13 oz. walleye he caught while fishing Pymatuning.







WAYNE BLANCHETTI (left) of Summerhill holds 25 in., 12 lb. catfish he caught while fishing the Fire Hole in Cambria County. Six-year-old Greg Beaver of Hartstown (right) caught 17 in. carp from Pymatuning Lake near the mouth of Bennett's Run.





PHILIP COURTRIGHT of Cresco, 13 (left) holds 24½ in., 6¾ lb. catfish he caught from Lake Wallenpaupack late in July on a nightcrawler. Bessemer fisherman Louis Grist, 11, (right) holds 14½ in. bullhead he took from the Youngstown Quarry in Lawrence County on a nightcrawler.



EDWARD TWIGG SR. of Manns Choice holds 38 in., 14 lb. muskellunge he caught at Shawnee Park Lake in Bedford County in May.



FISHERMAN MAX KLOPFER of Archbald holds stringer of 6 bass ranging from 2 to 4½ lbs., which he caught while fishing Lake Henry. All fish were taken on a rubber nightcrawler.



TWELVE-YEAR-OLD Shane Shaffer of Mifflintown holds 26¾ in., 10 lb. carp he took while fishing the Juniata River. It struck a doughball.





SHIPPENSBURG FISHERMAN Charles Furry (left) holds 19½ in. rainbow he caught. His 11-year-old grandaughter Nancy took and sent the picture to Fish Tales because she is "proud" of her granddad who often takes her fishing, she says. Levittown angler David Wyeth, 15, (right) holds 18¾ in., 3 lb. rainbow he caught at Levittown Lake.





JAMES SHAW of Johnstown (left) holds 21 in. smallmouth bass he caught on a Mepps while fishing the Susquehanna River in Dauphin County to become a Pennsylvania Angler Citation winner. Darryl Arawjo, 15, of Freemansburg (right) holds 16½ in. brook trout he took on a worm from Monocacy Creek in Northampton County to become a Junior Citation winner.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

Nicholson Sportsmen



CASTLES USED TO HAVE moats around them to keep the bad guys from getting to the good guys, but when the good guys wanted out they had to have a bridge to do it. And to make a long analogy short, so it was with the Nicholson Sportsmen Club in Wyoming County. These fellows have only been in the fish raising business one year—but let's hear the story from Dick Lochen, club president and nursery manager.

Going back to the bridge, Dick pointed out that a stipulation in the lease was to repair the old bridge leading across the stream to the nursery site. This was a small price to pay for use of the property and was a safety measure needed done anyway. So the Nicholson Sportsmen and the Nicholson Fire Company pooled their talents and built a new bridge sturdy enough to hold a tank. It should be mentioned in passing that cooperation between the two organizations on the construction project was no problem—in effect many of the fellows belonged to both outfits so motions to use equipment passed easily.

Mrs. Patricia Shultz of Doylestown, the property owner, was pleased with the results and then turned over the use of the land gratis for the club's trout project. In turn the sportsmen named the nursery the "Colonel Fred Evans Nursery" in honor of Mrs. Shultz's father who originally owned the land. But on to the business of raising trout.

The first raceway was of cement block construction with hinged screens to cover the fifty foot length. A second raceway of about twenty five foot length was under construction at the time of our visit. Additional improvements to the site included two cement catch basins so that all water from two springs, the sources of the nursery's water, could be utilized and controlled as desired. This phase of the work was completed early this summer. Everything seemed rosy for the first year of operation. However, Mother Nature has a way of taking a hand in things and high water produced some problems with the holding dam above the raceway. Part of it washed out and repairs had to be made. In time a new dam will replace the old one.

Don Farnham, the feeder, wanted to talk about the trout —after all that was why the thing was built in the first place, wasn't it? Feed is a typical mixed diet of pellets, liver and venison and the growth was good. What was most outstanding was the low mortality rate for a first year operation. Carefully kept records showed a loss of only 48 fish out of the original 2,000 fingerlings.

The Nicholson fish found new homes in the main branch of the Tunkhannock and Martins Creek. Stocking was done on May 18 with nine to ten inch fish being the order of the day. The stocking committee did their chore at night to give the 2,000 browns a chance to defend themselves. This stocking method is not particularly an innovation, but it does make for better fishing in the smaller streams.

And some credits for the first year's success are also in order. Space doesn't permit running the club's roster which probably should be done; however, in addition to the fellows mentioned above, the following were some of the prime movers in the project. "Spud" Nordahl was the man behind the construction; Dick Squire, a member, was always available on the work days as were Nelson Stull, Keith Hinkley and Norman Stout, the club secretary. And the list could go on through most of the 90 members on the club's rolls.

Dick Lochen, the club president, feels that the first year success has lent some enthusiasm to the club in other projects and membership is building. As a point of emphasis, he mentioned the club's newly constructed trap shoot on a member's property where monthly shoots are now being held, the construction of a rifle range in an abandoned quarry, and the fact that eight members took the Hunter Safety Instructor's Course and are currently involved teaching this to the youngsters of the region.

Then last but not least there is a certain amount of gleam coming out of an official eye in the area. Stephen A. Shabbick, District Waterways Patrolman, is showing a fatherly interest in the nursery. After all it is the first one in his county so why shouldn't he be proud of it?

So once again the tag line to this feature is worth repeating and that is that *Casting with the Co-ops* pays off for all concerned with the emphasis this time on the section of Wyoming Co. serviced by the Nicholson Sportsmen.



NICHOLSON SPORTSMEN CLUB members stand by the bridge they built in order to get their cooperative nursery project started. From left to right are club members Don Farnham, "Spud" Nordahl, PFC assistant nursery coordinator Paul Byers, club member Dick Squire, Waterways Patrolman Steve Shabbick, and club president Dick Lochen.

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Pittsburgh Marine Consultant

FROM J. J. S., PLEASANT GAP:

"What kind of canoe could I get that one man could handle under conditions of high wind and strong current; are there any metal or fiberglass canoes made under 50 lbs. in weight?"

—An experienced canoe handler would probably be quite safe under severe wind and water conditions even in a 20-footer, if it were properly loaded and trimmed. Grumman makes a 44 lb. aluminum canoe. A 45 lb. fiberglass model is offered by Rivers & Gilman Inc., and C. Sportspal of Emlenton makes a 29 lb. model complete with "spoontoons"—ideal for one man.

* * *

FROM P. L., HARRISBURG:

"My 22-foot inboard cruiser is still in the water, but I am worried about the engine freezing, even though I have drained the block carefully after each use. What can I do?"

—Buy a dipstick heater, sold at most automotive stores for easy winter starting of cars in unheated garages. Leave this in the crankcase, and your engine will be warm all winter. Another method is to keep a 75-watt bulb burning in the engine compartment, and some boatmen use an electric blanket over the engine. Any of these methods requires a source of 110-volt current, of course.

* * *

FROM T. C. G., PITTSBURGH:

"I have been trying to do some hull repairs on my fiberglass outboard boat in my garage, but the resin just refuses to set up in the cold weather. How can I lick this problem without attempting to heat the entire garage?"

—Pick up an infra-red light bulb at the hardware store, and rig an old floor lamp or other fixture that will hold the lamp about a foot from the area where you have applied the resin. The lamp will cure the repaired area in a few hours even if the air temperaure is below zero. It might also help to mix a bit more hardener than the normal proportion.

* * *

FROM G. B. F., LEBANON:

"My 16-foot runabout will make about 25 miles per hour with two persons aboard with my present 40-hp engine. How much more speed would a 60-hp engine give me?"

—You would be very fortunate to get another five miles per hour, since the added weight would largely offset the additional thrust, and the boat might be very hard to control as well. It is never a good idea to exceed the manufacturer's recommendation for power, since outboard hulls are usually designed to very close limits, and will not take kindly to oversized engines. You might also note that the Pennsylvania laws now prohibit overpowering.

FROM J. W. S., WARREN:

"Would it be feasible to bring a 26-foot cruiser down the Allegheny River from Warren to Pittsburgh on the spring high water?"

—Feasible, no. Possible, yes. If you really know the river between Warren and East Brady, and the water is high enough to float you over the riffles but not so high that you can't control the boat, you just might make it. Keep in mind that your insurance company may take a dim view of this trip, and refuse to pay for any damage you may incur. Offhand, we would suggest a trailer.

* * *

FROM C. M. H., BEDFORD:

"I am trying to repair the gunwale at the bow of my 14-foot wood fishing boat, but I can't get the new wood to bend along the right curve without splitting when I drill screw holes. Can you recommend a solution?"

—Certainly. Make a new piece of the proper dimensions, and soak it in water for about a week. Weight the piece down so that it is totally submerged. After this treatment, it will just about be supple enough to tie knots in, and you can paint it after it dries out in place.

* * *

FROM S. W., NORTHEAST:

"What is the proper method for keeping a storage battery during the winter months?"

—The battery should be thoroughly cleaned with a strong solution of baking soda, taking care not to get any of the liquid into the cells. Store the battery in a warm basement or garage, and charge it up about every two weeks. Be careful not to overcharge, and add water every time you charge it. When properly cared for over the winter, a storage battery will last for five years or longer. Improper storage will ruin a battery in a single season.



"SORRY, BUT WHEN HARRY FINISHES THE LAWN HE'S GOING TO THE RIVER WATER SKIING."

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DOCUMENTS SECTION

Season's Greetings

CONSERVATION VIEWPOINT

by ROBERT J. BIELO
Executive Director



THANKS TO MANY

With the indulgence of Angler readers I will use the Conservation Viewpoint column this month to ramble over a variety of topics.

I would like again to thank the countless private landowners who permitted fishermen to trespass along the banks of streams passing through their lands. This open sharing of private property is a wonderful tradition and certainly is worth a bit of special effort on the part of every fisherman to be sure he or she personally does nothing to jeopardize this privilege.

It is also appropriate to thank our other landowner hosts, the Pennsylvania Game Commission, the Department of Forests and Waters and the Federal Government as many of our finest fishing streams are on their land.

During the last year we expanded our Cane Pole Fishing Program and were impressed with the excellent cooperation extended by City Government officials. In many cases these folks really left no stone unturned to help make the Cane Pole Program an exciting experience for city youngsters.

I also want to publicly thank an outstanding Pennsylvanian who desires to remain anonymous for his personal contribution to the Commission of 10,000 cane poles, lines, bobbers and hooks. It's amazing what the concern and thoughtfulness of one man can mean in helping over 14,000 youngsters enjoy a day at a pond fishing—an adventure most of them had never before experienced.

Pollution of our waters continues frequently through careless operation, occasionally by deliberate intent and sometimes just by accident. As a conservation agency no excuse for pollution is truly acceptable, however we have been favorably impressed with the efforts many communities and industries have made toward pollution abatement. For this effort we are quite thankful and want to extend our commendations to these many companies and municipal governments that are doing an outstanding job of preventing stream pollution.

Certainly it would be remiss not to mention our appreciation of the outstanding support and coverage given to Commission programs by the news media. There can be no doubt that the backing by a newspaper tremendously enhances the chances for successfully pursuing a cause. This has been extremely evident in terms of pollution control work and the passage of sound conservation legislation.

The "sixties" have actually been a decade of progress in conservation affairs. Protection of our environment has become fashionable at all levels of government and society. Outdoor recreation has been recognized as being an important part of our lives. The need to make our waterways serve multipurpose use is now firmly established. The despoilers of our natural environment are no longer coddled, even by the most lax of our courts.

For all of these advances of the "sixties" we are grateful and also proud of our role in them. On behalf of the Pennsylvania Fish Commission, a conservation agency, I want to extend our thanks to every person who in any way, large or small, contributed to the successful revival of "conservation consciousness" in this last decade.

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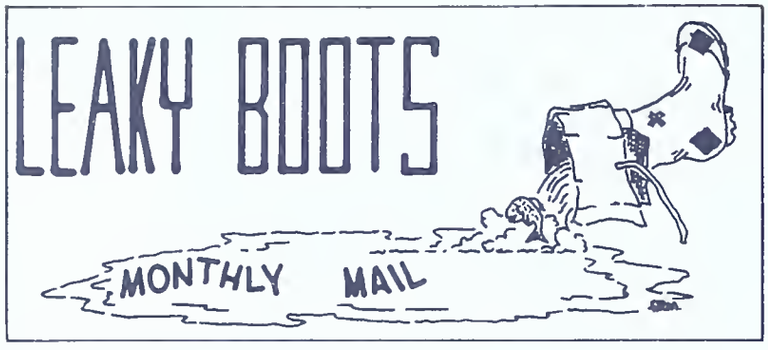
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DUCKY

Gentlemen:

On Saturday afternoon my wife, our 11 month old son and I had taken three neighbor boys along fishing to Antietam Lake. I had taken off to another fishing hole up the line further after everyone was settled but one by one the boys started leaving my wife to fish with me. Later the 10-year-old went back to my wife and began feeding corn and bread to the wild ducks, fascinated to see them come so close. He then asked if he could use my wife's rod and reel since he was having trouble with his. He baited the hook with corn and then laid the rod down, turning to my wife to say something. One of the ducks came out of the water, picked up the baited hook and went back into the water. My wife went in up to her knees—shoes and all—to try and retrieve her rod the well hooked duck had dragged off but with no luck. The duck swam around awhile and then headed to the other side of the lake and it became dark so we had to leave.

The next evening a fellow co-worker called and stated that he had been fishing with his son and noticed approximately 6″ of a rod sticking out of the water. (He had been talking to me the previous night and my wife frantically told about the duck that took her rod and reel.) So he retrieved the rod.



"IT'S THAT SMART-ALECK SKIER AGAIN!"

We drove to his house to learn that the rod was hers and everything was there except the hook.

Now everyone's happy again.

EARL R. HUBER, Temple

BUSY SMALLMOUTH!

Gentlemen:

I recently returned from a fishing vacation with my wife and daughter. My wife and I had a very unusual experience on about the fourth day of our trip. I hooked into a nice smallmouth and, as we were fishing from a boat, I asked my wife to retrieve her line so we wouldn't tangle. But she also had a nice bass on. After five minutes or so of fight we really had our lines tangled. My uncle was in the bow of the boat and I asked him to net my fish. He did. My wife and I both had hooked the same fish—a nice 2 lb. 7 oz. smallmouth! By the way I was using a jig and my wife was bottom fishing with worms.

CHIC ROSSI, Eagleville

SINCERE THANKS

Gentlemen:

I should like to express my sincere thanks and appreciation to Mr. Chauncy K. Lively for a superb job of presenting a truly fine series of fly tying feature articles in the Pennsylvania Angler last year. I was happy to see its reappearance last month.

It was an imitation of a march brown nymph I tied in accordance with Mr. Lively's expert instructions as illustrated in the April issue of the Pennsylvania Angler which a 7 lb. 2 oz. rainbow trout decided to inhale for breakfast on opening day this year in Kettle Creek, Potter County.

And my congratulations to the entire Pennsylvania Angler staff on a fine publication.

I should also like to take this opportunity to pass on to you a question which has puzzled a number of my fellow fishermen and me for some time. Each year the Pennsylvania Fish Commission extends the legal trout fishing season on certain waters throughout the Commonwealth. And each year I have a most difficult time in determining which of these waters have been so selected for the extended season. I don't believe it is the intention of the Commission to keep this information secret, so why not publish a list of the streams in which the season has been extended in the Pennsylvania Angler instead of relying on local newspapers to publish this information? I know it would be greatly appreciated by a number of anglers throughout the state who are unable to learn this information from their local newspaper.

GEORGE F. ALTEMUS, Levittown

Those streams to be included under extended season regulations are approved at the meeting of the Pennsylvania Fish Commission late in July. The approved list is not yet available then when copy for the October issue is due at the printing contractors.

While unable to include this list in the magazine, it is available (as announced in our October issue) to anyone wishing to write for a copy. A news release listing the streams is also distributed but, as Mr. Altemus points out, is not always used by local newspapers.

BE PROUD!

Gentlemen:

During a recent trip to Upper Woods Pond, I had the pleasure of meeting for the first time the Waterways Patrolman for Wayne County, Mr. Harland Reynolds.

This letter is written for the purpose of informing you about Mr. Reynolds. The Pennsylvania Fish Commission should be very proud of having him as a part of their staff. It is not necessary to go into any elaborate detail, but I would like to comment that the three "C's" which stand for Conscientiousness of his duty, Courtesy as an information source, and Cheerfulness as an individual, are truly a part of this man.

His position, like that of other officers, is something often taken for granted and the recognition due these men is not always expressed.

As a fellow sportsman, I wish him continuous success.

MICHAEL H. SKURECKI, Philadelphia

LUCK AT DUCK HARBOR

Gentlemen:

After the 1968 fishing season I wrote to tell you of our success at catching some large trout from Duck Harbor Pond. Most of those big trout were browns and I wondered at that time why more brown trout were not stocked in that lake. During the '68 season we caught rainbow trout in the 10 to 14 inch class and brown trout in the 4 to 7 pound class.

Well gentlemen I would like to "thank you" for the '69 season. This year we took about 30 to 40 brown trout in the 12 to 16 inch class and they weighed between 1 and 2 pounds each. We released all the brown trout that we caught in hopes that next season will bring these fish into the 3 to 4 pound class. And along with these browns we have taken the usual catch of rainbow trout and a few very large browns.

We would be happy to help in any way with information pertaining to our fishing at Duck Harbor Pond.

ANDREW SESAK, Clifton, N.J.

UNSELFISH EFFORTS

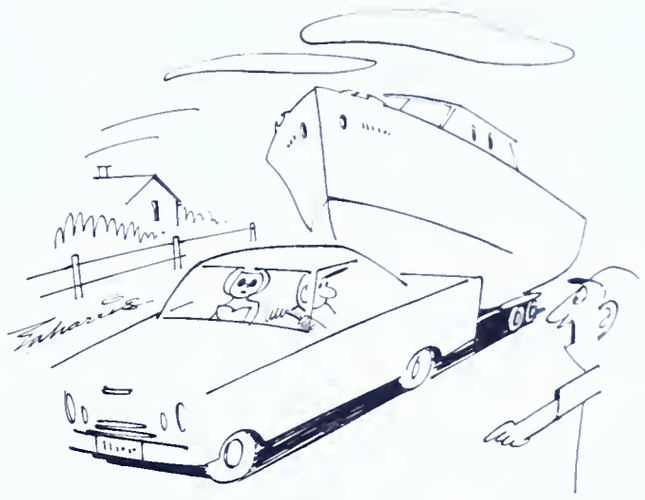
Gentlemen:

We want to express our most sincere thanks and appreciation to the Pennsylvania Fish Commission and to Conservation Officer Joseph Bartley for the unselfish efforts extended to our family on a recent vacation in the Pocono Mountains.

We have long admired the wondrous and beautiful State of Pennsylvania and for years I had hoped that my company would transfer me there. Since this wish has not been realized, we can only do the next best thing and that is to spend as much of our vacation and free time in your friendly state as possible.

On this recent vacation, our seven year old son caught a fine largemouth bass at Promised Land Lake. If it were not for some very friendly and helpful Pennsylvanians, he would not have been able to receive from the Pennsylvania Fish Commission the Junior Fishing Citation that he proudly displays on his fishing hat!

A local businessman weighed the fish for us; another, who sold us the ice to pack it in, gave us the telephone



"CONTINUE THIS DUE EAST COURSE FOR 10 NAUTICAL MILES—THEN MAKE A SHARP TURN TO STARBOARD, A 45 DEGREE CORRECTION TO PORT, AND YOU'RE THERE."

number of Officer Bartley. Mr. Bartley unselfishly came to our campsite on a Sunday morning to take pictures and measure the fish. He also took care of all the details for sending the information to the Commission!

We don't have the names of others who contributed to our excitement, such as the gentleman who took a polaroid picture (in color) and presented it to him, another gentleman who told us about the Pennsylvania Angler and the Fish Commission as well as a host of well-wishing and inquisitive anglers but we want to thank them all.

We hope this can be published in the LEAKY BOOTS section of your monthly magazine, the Pennsylvania Angler, so that Mr. Bartley and the others might see it.

We all realize that this was not a trophy fish (21½ in. and 4 lbs. 3 oz.) but to a seven-year-old boy it was quite large! Thanks again to all you kind and thoughtful people who took the time to help make a young boy's memory—a lasting one!

ALBERT R. CATTON, Milltown, N.J.

P.S. Enclosed is my check for a three year subscription to your fine magazine—the Pennsylvania Angler.

continued next page



WILD GINSENG—

Gentlemen:

Your writer, Mr. Wilbert N. Savage, did an outstanding job in his article on wild ginseng in the November issue of the Angler!

WALTER J. NEWARK, Cleveland, Ohio

WASHINGTON PLANTINGS—

Gentlemen:

I just finished reading my copy of the September Angler. In reading the Leaky Boots section Mr. Kommer's letter mentions that in my letter I said that the State of Washington planted 125 million fingerlings in the lake. I noticed that in the issue which you printed my letter I intended to write to you about the mistake. Either I or the publisher put too many zeros in the figure. I intended the figure to be 125,000 three inch fry. Most lake plants in Washington are fry of three inch size—not fingerlings. Would appreciate it if you would inform your readers of the correct number of fish.

Enjoyed reading the article about the cohos. One of the men I work with was back to Wisconsin last year and fished for them, catching several in the 20 pound size but he said they did not fight nearly as well as the salt water fish. I find the best lure for taking both the king and silver salmon in the streams is a 2½–3 inch long hammered brass or silver spoon.

Enjoy reading the Angler very much and wish our Game Department had a magazine like it.

EDWARD F. NAUGHTON, Richland, Wash.

PERSISTENT ICE FISHERMAN

Gentlemen:

I have a story that may be of some interest to other readers of the Pennsylvania Angler.

People who ice fish must be dedicated nuts to venture out into the cold of winter to stand on a lake of ice for 8 to 12 hours—I happen to be one of these nuts.

Last January I took a week's vacation to ice fish on Kyle Dam. I got on the ice about 1 o'clock. The fishing was good and I caught 10 northerns, all just under 24 inches. About 4 o'clock a tip-up went up and I ran over to check it. I slipped and fell on my ankle. At the time I did not know that it was broken. I laid there and hit the ice with my fist to relieve the pain. A minute later I heard the reel of my tip-up spin. All pain was forgotten and I crawled over to the tip-up on my belly and retrieved a nice 20 inch northern, then released it through the ice. I then returned to beating the ice with my fist to relieve the pain.

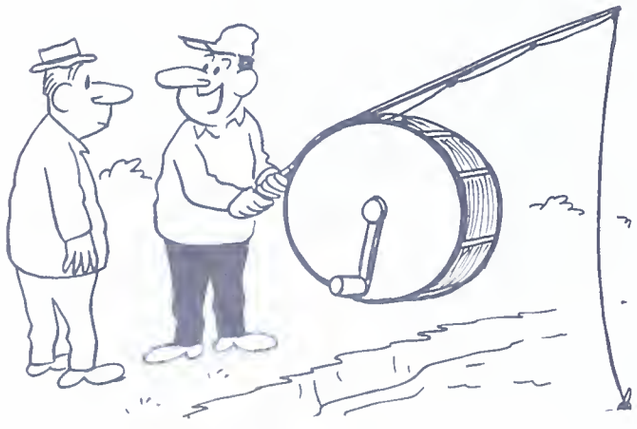
On that day there was no one else on the dam. I thought I had just sprained my ankle, so I continued fishing until 5 o'clock. This was rewarding because before I left I caught another 24 inch northern. When I returned home I went to my doctor—both he and my wife gave me a severe scolding—they say my stubbornness cost me an extra week in the hospital.

One thing I learned and I hope other people might learn from my experience—DON'T RUN ON THE ICE.

THOMAS D. JONES, Apollo



"#@%°¢$°&%)#°$¼@?%$XZ#$°"



"THESE COHOS REALLY RUN!"

BOAT PERMITS

Gentlemen:

In the July issue of the Pennsylvania Angler Capt. Ross was questioned by Mr. R. A. M. Weatherly about the need for a license permit or registration for his new 12 foot row boat.

Capt. Ross advised Mr. Weatherly that if he did not use a motor on this boat he needed no registration or permit of any kind.

Please be advised that Capt. Ross is in error.

Enclosed you will find an application for a boat launching permit which must be acquired and fastened to the boat it is issued for before you may launch a boat on lakes controlled by the Department of Forests and Waters.

Since your issue in the July magazine I have had many of my customers who have read this article ask if this is true or not. Naturally I tell them they must have the permit as this has been the procedure for many years.

DONALD D. NESS, SR.
Pecks Landing, Pecks Pond
Dingmans Ferry, Pa.



FISHING OUTLOOK

By-- Stan Paulakovich

DECEMBER ANTICIPATION

TO MANY PENNSYLVANIA ANGLERS DECEMBER is a month of anticipation. The average angler looks forward to those weekends when pleasant weather calls for a trip to that favorite trout pond or lake in hopes of picking up a few trout and the dyed-in-the-wool all year fishermen just can't wait for that first safe ice covering of the season. And the kids are looking forward to the morning of the 25th—maybe a new spinning outfit or tackle box will be found under the Christmas tree.

With the December first opening for trout in lakes ten acres or more all species of fish again are in season. Scattered over the state there are over sixty lakes or ponds that fall into this class. Check your Fisherman's Guide for these. The winter season continues through February 15, 1970. And remember the creel limit during this period is three trout.

Bait fishermen will rely on the old standbys—worms, salmon eggs, cheese or minnows. Spinners fished now should be moved as slowly as possible as the cold water has slowed the fish somewhat. Until freezeup, when new areas can be reached, shoreline fishing is generally good.

As Jack Frost bends to his task and the ice begins to firm up, the ice fisherman has his hey-day. While four inches of clear ice is generally regarded as safe for fishing it is wise to have at least six inches where lakes and ponds are subject to changes in water level or a lot of current or surface agitation. Northern pike, chain pickerel and the walleye are excellent for game fishing through the ice and the yellow perch and crappie bass are tops for the pan fishes. Minnows head the list for baits for these species followed by grubs, meal worms and garden worms. Spoons or spinners and small jigs are sometimes effective and should always be with you on an ice fishing trip.

Bear in mind that the minimum size for pickerel during the winter season is 16 inches and the creel limit for walleye, and pickerel is three each and only three large or smallmouth bass combined.

Next in importance to safe ice in winter fishing is plenty of warm clothing. Footwear especially should be of the insulated type of water resistant material. Boots of leather, no matter how well treated will soon absorb moisture from all the ice and snow and whenever your feet get cold it seems you're cold all over!

As you're setting up your tip-ups through the ice this year, try to work out from shore at different depths or across a bar or channel. Then set your baits at different levels to give you a better chance to find the level at which fish are feeding. When the feeding level and the channel or zone is located, all your holes can be placed in this line. Remember the new rule which limits the size of the hole to 10" in diameter.

The walleye, crappie and yellow perch are notorious for traveling in schools, generally all in the same size class. When your minnow or bait has done the trick and one of these is safely flopping on the ice, it is wise then to have a jigging rod ready with those jigs, spoons or small spinners. Often more than a few fish can be caught in a short time before the school moves on. Jig these slowly in short six inch jerks at the same level where the fish were caught.

Of all the species mentioned earlier, the most sought after during the ice fishing season will be the yellow perch. We have many waters where yellow perch were stocked and relatively few are caught during the summer months. North Park Lake in Allegheny County for instance yields few perch all year and this body of water should contain some lunkers in the 18 inch class. Other places like farm ponds, swamps, beaver ponds or isolated ponds back in the woods which because of their location or physical properties are difficult to fish during the summer are ideal for ice fishing.

And if you're not up to some cool fishing in December, this is a good month to go over your tackle box and vest and inspect your rods, reels, lines, and lures to prevent rust and rot. Fly tyers are generally starting now to create patterns that will be the "killers" of next spring. If you're a member of this fraternity this is also a good time to teach fundamentals of fly tying to some young boy or girl. Some of their ideas of fly patterns will amaze you.

Happy Holidays to all Pennsylvania Anglers!



A Time To Be Thankful —

With the Christmas season upon us, now may be the time to give thanks for the fine fishing Pennsylvania—and the entire United States—has to offer. The following article by Scotsman Roderick Wilkinson may give us an idea of what it's like elsewhere. Perhaps we should be thankful that we don't have to go . . .

Hunting FOR FISHING In Czechoslovakia

by

Roderick Wilkinson

THE BROCHURES said that Czechoslovakia was a fisherman's Paradise. "Enjoy an angling holiday of a lifetime!" "Hundreds of lakes and streams teeming with fish!" "The fisherman's holiday land!"

Now that I have *had* two weeks in that troubled land I now know what they mean when they boast that it is a hunter's and fisherman's paradise. They're talking about hunting for *permission* to fish. I spent days hunting for the right offices and more days fishing for information than at any other time in my life.

It happened this way. I sold two of my books in Czecho-

I WAS ASSURED BY THEIR LETTERS . . .

slovakia and because they couldn't get my fees *out* of the country, I was invited to bring my family—and my fishing rod—to the country for a two-week holiday.

So we set forth from Scotland and traveled by car across Europe in late July—just a few weeks before the big political blow-up—and my three children and my wife were actually saying how they hoped my fishing activities wouldn't leave them on their own too much. After all, didn't I write many letters to the tourist office in Prague saying I wanted to fish as often as possible? And didn't they book us into a first-class hotel for three days in Karlovy Vary, the Bohemian paradise spa surrounded, I was assured, by rivers and lakes teeming with fish, etc., etc.? And didn't they book us for another three days at Stary Smokovec, four thousand feet above sea level in the High Tatras just sixty miles from the Polish border? And, in between, short stays at Prague, Olomouc, Trencin and Brno would be *bound* to give me all the waters I needed for every kind of fish imaginable.

It all started when we reached the famous Moscva Pupp hotel in Karlovy Vary. Neither the hall porter nor the receptionist had the faintest idea where I might fish, when I could fish, or how I could get permission to fish. The national tourist office in the town produced an official expert on the subject who actually sat down to discuss fishing with me.

"You here for long, Mr. Wilkinson?"

"A few days—then we move on."

"So. And you wish to fish here?"

"Yes, please. Somewhere nearby."

"It is very difficult."

"Difficult?"

"Yes. First you have to obtain your national fishing license. This costs about twenty crowns and it can only be granted if you can give us evidence of being a member of a recognized fishing club in your own country."

I PRODUCED A COLOURED BROCHURE FROM MY POCKET . . .





"Well, I am. Where do I get the license? Here?"

"So sorry—no. You get this in Prague."

Three fishless days later I called at the big tourist office in Prague—the central core of all tourism, the headquarters of everything to do with holidays, travel and red tape. A sympathetic young lady explained that hunting and fishing licenses were issued by their Hunting and Fishing Department. Where was that? In another street.

I really thought I was home safe when I walked into the sporty-looking Hunting and Fishing Department Offices. The man who sat at a desk actually wore a Norfolk-style tweed suit. He looked as if he had just shot twelve bears and caught three salmon before breakfast. And he sold me my license. No trouble.

"What do I do with this now?" I asked.

"Where do you travel from here?"

"Well—we'll *be* here in Prague for three days."

His face lit up as if I had just lifted him off a hook. "Three days! Ah, there—you see? There is no time for you to find fishing water near Prague. Then where do you travel?"

"Olomouc—for a day."

He pursed his lips and shook his head. "Olomouc. No good. One day!" He shrugged.

I became blunter and more determined. "Then we go to Stary Smokovec for *four* days." I glared at him. "In the High Tatras." I produced one of the coloured brochures from my pocket. "Four thousand feet above sea level." I opened the brochure at the correct page showing an angler landing a twenty-pound something. "Where there are scores of rivers and lakes to fish." I quoted as I followed the lines of print with my forefinger. "The fisherman's mountain paradise where the big ones are!"

But he made it. Oh, yes, he escaped all right. His eyes lit up as he patted my knee. "Then it is all right! Stary Smokovec. You stay at the big hotel. No trouble. You take this license there and you say to the hotel manager. . . ."

continued on page 27

THEY'RE ALL AROUND US, ALTHOUGH MANY TIMES WE MAY NOT EVEN NOTICE THEM. THEY'RE THE . . .



Noises of Nature

by
Carsten Ahrens

MANKIND HAS LONG BEEN AWARE that the sounds of nature do a lot to add variety and interest to his existence. An absolutely silent world, if one could imagine such a place, would be amazing at first as a novelty, but it would soon become monotonous. Consider the many voices of wind and water, the various approaches of rain, the zither-like quality of sleet, bang and echoing roll of thunder, booming across a lake of the ice break-up in the spring, sounds of falling water from the roar of a cataract to the whisper of a slender, distant waterfall.

One can understand why God gave us just one nose but two ears: there are so many pleasant sounds to hear. There are songs of little brooks, brawling of white water down a mountain cliff, and crash of stormy breakers against Maine's granite cliffs; soughing of breezes through pine boughs, night-long complaining of winds in the shrouds of my sons' sloop, and whistles of gales about gables and shutters of dwellings in which I have lived.

Manmade things make easily recognizable noises: drone of an electric motor, hum of telephone wires, whir of a turbine, staccato of a compressed air drill, whine of a great, rapidly moving belt, or the triumph of a circle saw eating through the trunk of an oak. Once in a housing project I was bewildered by the cacaphony of a dozen radios each tuned to a different station with some apparently set to outdo the others.

Added to the decibels of these inanimate things are the noises of the living creatures of the earth. One must note that sounds produced by one species are rarely meant for any animal except another member of its own kind. No bird sings, of course, to bring pleasure to man no matter how his vanity may incline him to think so. When a mourning dove cries plaintively and tumbles about like an almost helpless cripple in front of you, it is its instinctive way of leading you away from its nest or

illustrations by Karin Ahrens DeStefano



NESTLINGS LIKE THOSE shown on the opposite page require much food at regular intervals. Their noise keeps their harried parents informed of their needs, but it often notifies a predator of their whereabouts. To the right is a male cricket which makes its characteristic sounds by rubbing its two fore wings together. Each bears a "scrapper" and a "file" with vibrating membranes between. Unlike most females, this female is silent.

young. Animals can make angry sounds to frighten an intruder from the scene, but, in most cases, their sounds are meant to get the attention of others of their species.

Have you noticed when you're speeding along in your car, how above the purr or the roar of the motor, for a split second you hear a bird's call? It may be a bird of the roadside, a robin or a meadow-lark, or in a bit of woodland through which the road winds, a red-eyed vireo or a song thrush. It's an additional bonus for your trip.

Perhaps it's because I'm earth oriented instead of being sky minded that I'm always made aware of migrating flocks of wild geese by their Indian calls; my ears rather than my eyes discover that a bird squadron is moving through the heavens. A family hand-me-down has it that when I was first walking, I heard the strange honking of these migratory water fowl, tottered to Mother in the kitchen, and holding up one finger, said, "Hear, Hear!" I became decidedly scornful when Mother listened, then said, "Geese in the sky," for the only geese I knew were our great, domestic Toulouse geese that when feeling their most exuberant could raise their heavy bodies at most but a foot off the ground. Geese in the sky, indeed!

Don't live anywhere that you can't enjoy each spring the twice daily "Hymn to the Sun" with which birds greet the new morn and speed day's close even if the choristers are only robins. Yet there are persons who complain and wish someone would "turn off" the birds in the morning. Of course, not all birds are talented musicians like the mocking birds, brown thrashers, catbirds, and most of the thrushes. The majority are not. Consider the "songs" of any of the woodpeckers, herons, crows, magpies, blue jays, or the birds of prey; and yet, if you live close enough to some of these you'll discover they can produce notes another generation would have called dulcet.

You may have awakened in an early spring night by killdeers flying overhead and shouting "kil-ill-dee, kil-ill-dee" into the darkened sky. There is often a great difference in the tempo of their calls; there is an urgency on some evenings that is completely lacking on other nights.

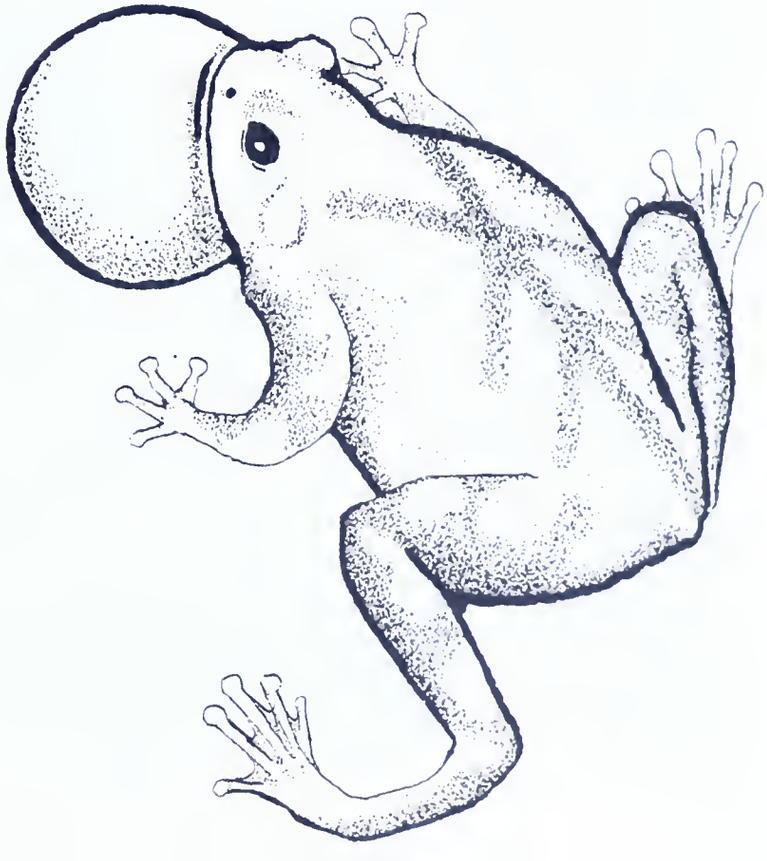
And there's a thrill—with a bit of a chill in it—when the first tremulous notes of the little brown screech owl is heard, or the sonorous hoots of the larger owls groan through the aisles of the forest. Big or small, the owls add mystery when their voices ride the night winds or suddenly fill the silences.

Crickets, long-horned grasshoppers, katydids, cicadas "sing" or rasp or whatever they do to produce their various noises which often go on hour after hour. Like traffic noise, one can become oblivious to insect sounds until a sudden drop in temperature causes them to stop and one is almost stunned by the silence.

There are sounds and sounds. You would instantly associate with the animal that produced it a grunt, meow, bark, roar, bellow, neigh, baa, etc. An angler would appreciate the splash of a leaping fish, especially if the fish hadn't been striking. Once you have heard the insistent BUR-R-R-R of an aroused rattlesnake, you'll never forget it. Other sounds like the drowsy hum of a bumblebee; snap of a clickbeetle; the tap of the death-watch beetle; the hissing of various reptiles, some birds, and even mammals; the celophane-like rasp of dragonfly wings in aerial combat; the love choruses of toads and frogs . . . all add variety, although the discord of mosquito wings in the still of a hot night can be mighty exasperating.

The average human being makes an assortment of sounds when he grunts, talks, growls, burps, sings in the shower, but rarely are these attainments considered musical or beautiful. An Enrico Caruso or a Lily Pons is a rarity. By inventing pipes to send his breath through, strings and membranes to be vibrated, man produces a vast variety of sounds, musical or otherwise. Like a flicker on a metal barn roof, he has discovered that he can manufacture sound.

The best wish for any outdoorsman is that the laughter of loons in the night may bring him out of a sound sleep, not startled, but comforted and reassured somehow that all's well in his bit of the world.

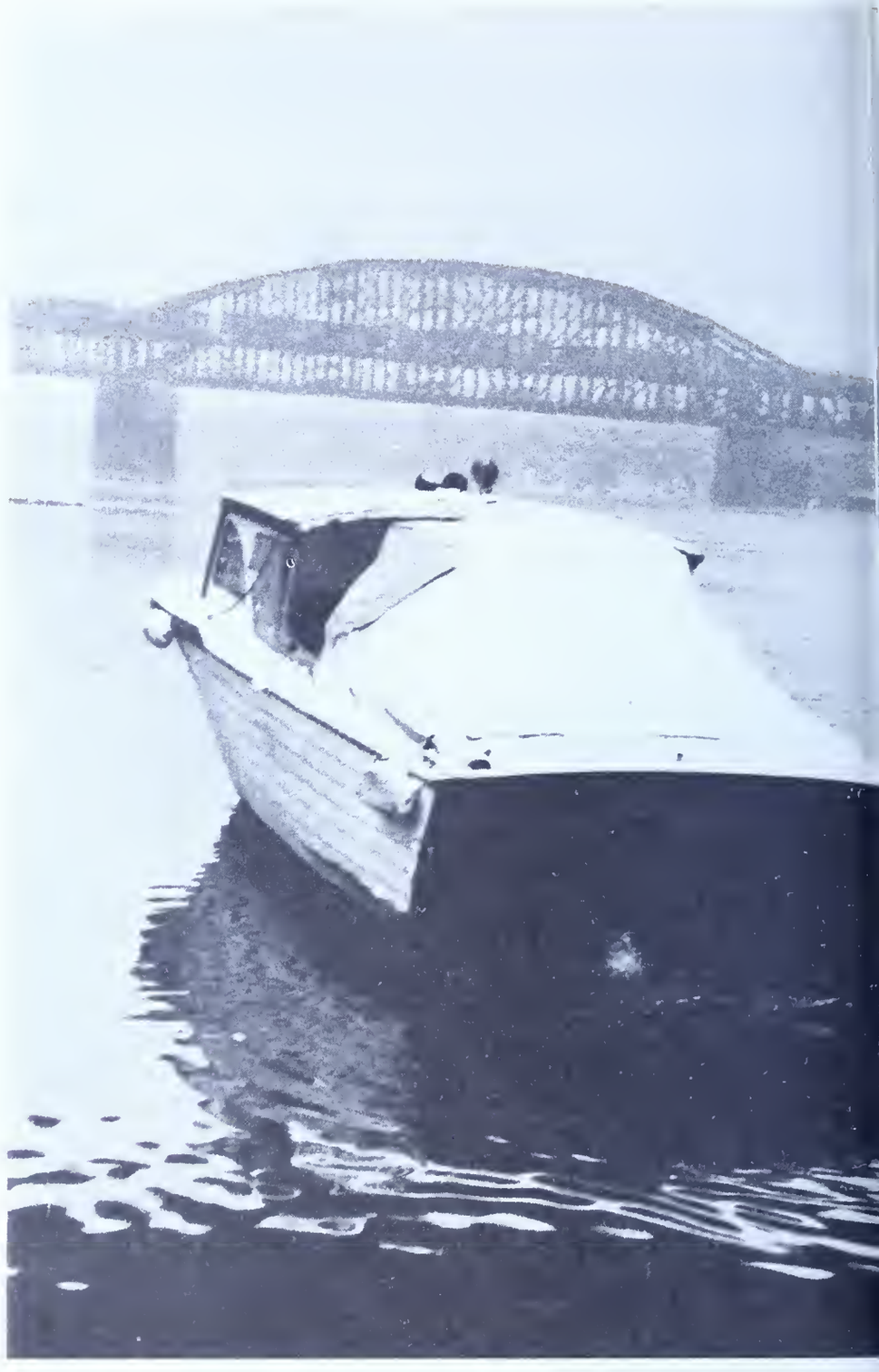


THE MALES OF MOST FROGS and toads can inflate the throat into a sac that is responsible for the roar of a bullfrog or the music of a spring peeper.

Winter might not seem like the time to enjoy your boating, but it happens every year with increasing frequency on the Allegheny. Don't be surprised if you see some power boaters this winter enjoying . . .

Winter Cruising

by
STEVE
BUTCHOCK



AS A RULE PENNSYLVANIA BOATMEN are punctual people. They observe traditional guidelines. Most of them have their craft in the water by Memorial Day; neglect the waterways after Labor Day; and miss the ecstasy of "winter cruising."

The belief that boating is a summer fad isn't wholly accurate. Boaters running in the cold season are on the increase, though still on a limited basis. Those who do boat in sub-freezing weather are looked upon as "fanatics" rather than customary "diehards."

Lately, however, fanaticism has been more discernible. It's a dignified way of saying, "Winter cruising is making strides."

One date that jogs my memory is December 27, several years ago. It was a winter in which the temperatures were unpredictable—swinging madly. There on the Monongahela River near The Point in Pittsburgh a man was launching his boat. It might have been a Christmas gift—because the showroom gleam was evident. The operator wore a magnetic smile. So did his passengers. Cold was proving no deterrent to these warmly dressed pleasure boaters.

One "winter cruiser" is John Bell of Avalon, a suburb of Pittsburgh. He already has gone up the Allegheny River as far as Brady's Bend in his enclosed inboard.

"We put a small propane heater in it," says his river companion, Bob Bell, "and it stays warm. When people see us, it usually causes a stir. One surprised lock attendant exclaimed, 'What the #★¢! is this coming.' "

Once November arrives, "We get some stragglers," explained one lock attendant.

At Lock No. 2 on the Allegheny River—the hub of boating activity in Western Pennsylvania—annual lockages exceed 6,000. More than half this total is pleasure craft. The following chart shows official lockages as recorded by the U.S. Corps of Army Engineers. They are by no means indicative of the traffic in the winter, however. As a lock master said: "We see some boats above the locks, and some on the lower side. But many just come up, swing around and leave. Where they come from we don't know."

Actual lockages indicate, too, a trend toward more activity in winter. This past November—which had a snowstorm in mid-month—there were 15 pleasure craft locking upriver and 9 downriver. Of these, 19 were inboards and 5 outboards. These statistics are only for Lock No. 2. The Mon River has 8 locks, the Allegheny 9 and the Ohio 2, within Pennsylvania.

Pleasure craft cavorting in winter are likely to be enclosed inboards rather than outboards. But unexpected thaws often bring out both.

With inboards left in the water until severe freezeups, if any, special preventive care is required. Water intakes must be closed; sinks, toilets and other lines drained.

Still lakes, dams and reservoirs in Pennsylvania are left to ice skaters and fishermen, as they freeze over while many boats remain in the rivers.

Outboard owners who trailer their craft frequently take advantage of warm spells when the temperature might reach the 50s. But with each passing winter it's no passing fancy that "winter cruising" is adding a new dimension to boating in Pennsylvania.



BOATER JOHN BELL of Avalon makes occasional runs during the snowy months on the Allegheny. On the opposite page he starts upstream from Faust Marina where he docks his cruiser while above and below he comes in from a run. One comment about winter cruising—"it certainly isn't crowded."



THE SEA BAG

by Bob Miller

A column of news devoted to the activities of boat clubs, flotillas, power squadrons and items of interest to Pennsylvania's boaters.

DEDICATE NEW RAMP

About two years ago the Columbia Borough Council leased from the Old Public Ground Co. a tract of land along the Susquehanna River, between Walnut Street and the Lancaster-York Intercounty Bridge, and began developing it into a park.

Picnic tables were placed about the area, there were water and sanitary facilities provided transient campers, and boaters were permitted to continue the construction of docks for summer activities.

Early in 1969 a boat ramp was constructed by the Pennsylvania Fish Commission, along with a parking area



AN OVERALL VIEW of the new Pennsylvania Fish Commission boat launching ramp at Columbia which, along with the adjoining park area, was dedicated by the borough in August. Shown in the insert photo, taken during the dedication, are Rep. Jack Horner, Elizabethtown, on the extreme right; Mayor John Spicer, center; and Councilman Harry Shank, on the left, all principal speakers during the brief ceremony.

large enough for 50 automobiles, and during August the park and ramp were officially dedicated by the borough officials.

Principal speakers for the occasion were Rep. Jack Horner, of Elizabethtown; Mayor John Spicer and Councilman Harry Shank. Glenn Hershey, local Scout leader, served as master of ceremonies for the riverside event.

CHRISTMAS GIFTS

This is that time of the year, with Christmas just around the corner and few shopping days left, when some folks start scratching their heads wondering what to buy the pleasure boating enthusiast.

Certainly he'll appreciate a brand new necktie or shirt but his eyes will twinkle and there will be a great big grin if what he unwraps turns out to be a brand new piece of boating equipment.

Most boats, particularly the showroom models, are well equipped with just about anything and everything imaginable but there are still certain items which, I'm sure, the boat owner would enjoy finding under the tree on Christmas morning.

Recently I made a spot check with some of the Pennsylvania Fish Commission's "Blue Book" information centers, and came up with items ranging from $1 to $150.

For example most marine dealers have a floating key chain which sells for about $1, a set of color coded cork coasters, $1.29; boat plaques, $1; a filter funnel, $1.49; nylon owner pennants, $1.50; or a rubber utility scoop, which can be used as a dust pan or baler, for $1.98.

If interested in spending $2 upwards there is a clean up set for $2.29, a tool caddy, $2.98; marine flags, $2.50 each; a floating hand lantern, a handy item to have on board at night, for $2.45; and colorful bean bag ash trays which sell for $2.50.

Looking for something real practical? How about a drin kamte, of either stainless steel or chrome plated, for $2.95 or $3.95; perhaps a mooring snubber for $3.49; a gas tank tray, $3.49; or a cork ash tray, ideal for the den, for $4.

A boat hook would make a fine gift. They have price ranges of from $3.95 to $8.50 while a battery box for the wet cell 6 or 12 volt battery sells for $5.95 to $8.95. A combination chart light-cigarette lighter which can be mounted on the dash of a runabout or cruiser is $6.50. And there's a practical bottle opener and ice pick which sells for $5.

To keep your friend's boat looking as good as new why not present him with a fender or two which range in price from $1.95 to $14.50 depending on size; a lantern holder, great for night fishing, $5.95; and a brand new anchor is always a welcome gift. These sell for $5 to $175.

A cabin or table lamp for $7.95 is suitable for any den, cigarette lighter and ash tray set, $7; cork book ends, $7; coaster sets with an inlaid compass decal, $5; and desk sets, a barometer for $19.50, and a marine clock for $34.50.

A whole string of colorful pennants are $6.95, for the cottage or strung out along the boat dock; a Coast Guard

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Coho fishermen on Lake Erie this fall as well as fishermen and recreational boaters all year long (for many years) have been passing within a stone's throw of thousands of dollars of valuable treasure without ever knowing it. Many ships have gone below in the big lake and most are still there, harboring their valuables.

One of the most valuable (half a million dollars) lies somewhere northeast of Erie an estimated 10 to 15 miles; another (a quarter of a million dollars) rests an estimated two miles offshore from Walnut Creek where many salmon have been taken this fall.

If you've been on Lake Erie's waters this year you may not have been far from . . .



LAKE ERIE'S TREASURE

by
Lieut. Harry E. Rieseberg

LAKE ERIE'S surprise storms —still a danger to boaters—sunk many ships of the past. Sailing vessels as well as many steamers went below under the lake's deadly pounding.

STORY AND PARTIAL LIST OF WRECKS

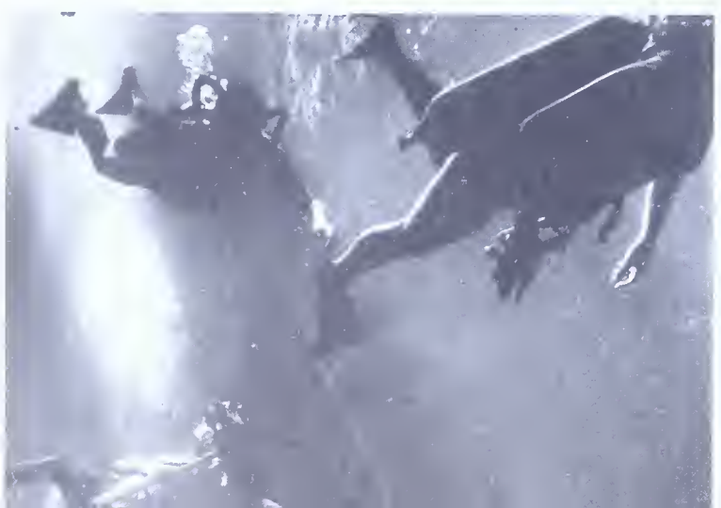
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SCUBA DIVERS examine the timbers of a long-disintegrated ship in an attempt to find clues to its identity. Very little is usually left of wooden ships sunk in the early 19th century.



A SCUBA DIVER explores the wreck of a huge Lake Erie steamer that sunk during the 19th century above while below divers prowl the waters of the lake in search of a wreck.



continued—

LAKE ERIE'S TREASURE

SEVERAL YEARS AGO, a group of Canadian diving enthusiasts spent an afternoon afloat and in the deeps a short distance offshore near Turkey Point at the entrance to Long Point Bay in Lake Erie. Having located a site of a long distintegrated wreck, they had set forth in a small chartered inboard boat with scuba diving apparatus and considerable optimism; the sunken wreck, an old steamer that had gone down in the late 1800's had been pinpointed earlier. It was hoped that the ship had carried valuable cargo of an unperishable sort.

Their underwater search was methodical. With bare hands, the scuba divers probed through mud and ooze on the lake bottom around the rotting masts and spars, rusted smokestack, and other debris of the wreck. After nearly twenty minutes of searching, one of the group made the first find: there, directly before him on the mud bottom, appeared several dull brown coins.

By the time the last traces of light had vanished from the depths and forced the party to return to shore, the divers had made repeated descents and within a few short hours they were rewarded for their efforts beyond the most optimistic imagining; by nightfall they were tangibly richer by some $40,000. The name of the old ship and its date of sinking were unknown, perhaps unrecorded—hundreds of lake vessels down through the years have been reported only as missing and their fates never determined—but it probably was one of the early freighters carrying a consignment of specie to one of the lake ports and losing its course in a storm.

The bonanza was not the first instance of scuba divers recovering treasure from the waters of Lake Erie, nor will it be the last. Many experienced swimmers and divers—even yachtsmen and small boat owners—have made a hobby both adventurous and profitable in this bizarre calling. But not much news is spread on any underwater find because modern treasure seekers are similar to their earlier-day counterparts in this respect; the secrets of location and discovery are seldom divulged publicly for various excellent reasons.

Scattered along the bottom of Lake Erie are a large number of sunken shipwrecks (more than 3,000 vessels have been lost in Lake Erie waters), and there's real treas-

ure still resting in many of these old hulks. Even in the older wrecks, the gold and silver specie, the iron, steel, and copper, and other unperishable cargoes remain undisturbed, waiting for salvors to bring them up.

Few ships went down without taking some gold and silver or other treasure with them; even military ships, coastal and inland water schooners, tramps, and freighters carried money to some extent, mostly for operating expenses and the payment of their crews. However, of greater interest than these latter-day craft are the ships of earlier periods, with their huge consignments of gold and silver stores, usually little known to the general public. In this salt-free lake water, such treasure still lies buried to the tune of millions of dollars.

In 1960, a group of scuba divers with treasure on their minds anchored in Lake Erie approximately four miles off Silver Creek, over a spot twelve fathoms deep. One of the group descended to a submerged wreck's remains and, peering through a dense gray murk, he saw the charred, ghostly hull of what had once been one of the finest steamers in the Great Lakes service. The divers were unaware of the identity of their find at this time—this was learned later from library records in Buffalo—but it was the steamer *Erie*, which had been destroyed by fire and sunk on August 9, 1841. When the first diver resurfaced twenty-five minutes later, he brought up with him a handful of foreign coins. After five descents by the trio of divers, some $1,200 in rubles, marks, kroner, and English sovereigns had been recovered.

The *Erie*'s post-sinking history is typical. In 1854, an attempt had been made by a Buffalo salvage firm to reclaim some of the wreck's treasure—suited divers had located the steamer's remains and tried blasting—but without any real success, although they did recover sixty tons of broken machinery and some specie. They also found numerous skeletons of the crew, intact, and all that was left



SCUBA DIVER photographs parts of a wreck.

of her master, officers, and about three hundred passengers, mostly German and Norwegian immigrants headed for the West. The treasure believed to be aboard the *Erie* consisted of some $100,000, carried across the Atlantic by these immigrants in order to purchase land in Wisconsin for settlement. The modern-day salvage venture brought the scuba enthusiasts only $2,000 in coins; it seems quite logical that the balance of specie still remains on the lake bottom where the vessel sank.

The Lake Erie wrecks are everywhere, but seldom is the public aware of their proximity. In some places, the wrecks are guarded by shoals and jagged rocks, by undercurrents, or by storms that lash the waters in winter. Fishermen, season after season, may drop anchor within yards of submerged wrecks without suspecting the presence of possible treasure under their keels. Some fishermen find their way to such spots by mere chance; others pause when their depth indicators, responding to a bottom irregularity (such as a wreck) lead them to believe they're over a hot fishing spot (in this they are correct—wrecks invariably harbor fish).

Sunken wrecks also are protected, ironically, by the skepticism of the unenterprising and unimaginative, who smile at the gullibility of treasure seekers. True, there have been enough hair-brained and ridiculous expeditions to justify such an attitude, but when a man makes salvage his life's work (as the author of this article has done), he learns

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*SELECTED LIST OF UNSALVAGED TREASURE SITES**

Name of Vessel	Flag	Rig	Date of Loss	Amount of Loss	Location of Sinking	Depth (fathoms)	Nature of Treasure Cargo
Jean Florin	French	Frigate	July 2, 1721	$500,000	10–15 miles NE offshore Erie, Pa.	12	Gold and silver bullion, specie
Erie (1)	American	Steamer	Aug. 9, 1841	100,000	4 miles off Silver Creek, N.Y.	8	Gold and silver specie, 75 bbls. whiskey
Kent	American	Steamer	Aug. 12, 1845	65,000	7½ miles SE of Pt. Pelee, Ont., Canada.	16	Gold and silver specie
Lexington	American	Steamer	Nov. 19, 1846	100,000	4 miles off Pt. Moulle, Detroit River.	12	Gold specie and 110 bbls. whiskey
Chesapeake	American	Steamer	June 9, 1847	16,000	3 miles due N Conneaut, Ohio	7	Specie
Anthony Wayne	American	Steamer	Apr. 28, 1850	96,000	6½ miles NW of Buffalo, N.Y.	11	Specie, wine and whiskey
G. P. Griffith	American	Steamer	June 17, 1850	40,000	Off Mentor, Ohio.	6	Specie
Atlantic	American	Steamer	Aug. 20, 1852	60,000	3½ miles E of Long Point tip, Ont., Canada.	20	Gold, silver, specie and whiskey
Oneida	American	Steamer	Nov. 7, 1852	30,000	Off Fairport Harbor, Ohio.	5	Specie
City of Detroit	American	Steamer	Sept. 3, 1873	100,000	4 miles N of Barcelona, N.Y.	16	Gold, specie and copper
Young Sion	American	Steamer	June 13, 1881	225,000	2 miles off mouth of Walnut Creek, Pa.	6	Gold, specie and railroad iron
Dean Richmond	American	Steamer	Oct. 14, 1893	300,000	4 miles E of Van Buren Pt., S shore, N.Y.	20	Gold and silver bullion, 220 tons pig zinc.
Marquette & Bessemer No. 2	American	Car-ferry	Dec. 7, 1909	65,000	9 miles E of offshore Conneaut, Ohio.	12	Specie, iron and railroad cars
Clarion	American	Steamer	Dec. 8, 1918	120,000	7 miles SE of Pt. Moulle, Detroit River.	11	Gold and silver bullion, 12 locomotives
Cleveco	American	Barge	Dec. 2, 1942	80,000	3½ miles E of Cleveland (Euclid Beach), Ohio.	5	Specie, fuel oil (1,000,000 gals.)

Footnote: (1) Some small recoveries made to date.
(*) For further listings of shipwrecks see the *Lytle List*, published by the Steamship Historical Society of America, Mystic, Conn., pages 209–277 ($5.00)

Also *Guide to the Sunken Treasure Ships of the World*, by Lieut. Harry E. Rieseberg, published by Frederick V. Fell, Inc., 386 Park Aveune South, New York, N.Y. ($5.95)

ANGLERS LINED Erie's shorelines for some coho surf fishing when the run began (above) and when the fishing was slow they turned to a soft spot in their boats or on the lawn at Walnut Creek for some rest (below).



ON SEPTEMBER THIRD of this year a statewide release left the Pennsylvania Fish Commission's Harrisburg offices. It said:

"One swallow doesn't necessarily make a summer and one coho salmon doesn't necessarily indicate a manor spawning migration. But recent catches of these exciting game fish, introduced into Lake Erie two years ago as fingerlings, has encouraged Pennsylvania Fish Commission fishery biologists to think coho may be coming back to tributary streams right on schedule.

"Three adult coho, netted by the Commission's research vessel 'Perca' on August 29, are the first confirmed sign that a coho run may be developing."

So began the 1969 coho return! As the days passed both fishermen and Commission personnel awaited word of more catches by either the frequent research trips or by fishermen, but it wasn't until after mid-September that any

Another coho story to appear in coming February Angler!

number of additional fish began appearing along the Lake Erie shoreline. Then many of those that were returning were precocious males or "jacks" 12 to 16 inches long. As in 1968 a number of those year-early fish were both being caught by anglers and being taken at the Commission's weirs in the mouth of each of the tributary streams where they had been released early in the spring. Return of a percentage of the "jacks" is normal and biologists predicted that their return would soon be followed by full grown adults. And they were!

Scattered reports drifted in of fish measuring over 20 inches and weighing up to 8 pounds, however high water temperatures in the lake were still holding back most of the fish, biologists said. The full blown run could not be expected until temperatures dropped to the mid 50's or even lower.

As September faded away and October began additional fish were reported daily when Lake Erie's weather would permit boat launching or shore fishing.

As October progressed fish over 25 inches and weighing nearly 10 pounds were reported and the officers and biologists on patrol at Walnut Creek began noting more and more catches. Water temperatures were slowly dropping and this seemed to be bringing the "big ones" closer and closer to shore. Successful anglers reported they were catching fish on relatively small gold or silver spinners or by trolling with medium size silver spoons. Most fish were being taken either early or late in the day—from dawn to 9 A.M. and from 4 P.M. to sunset.

At the same time coho that escaped the anglers' lures were trapped daily in the mouths of tributary streams by the Commission's fisheries personnel. These fish, including both adults and many of the early run "jacks" were loaded and hauled to Lake Pleasant near Union City and to another pond on Presque Isle peninsula where anglers were permitted another try at them.

No one was predicting how long the run would last, but by the end of October (when this issue of your "Angler" went to press) between 500 and 1000 adult coho had been reported caught by fishermen at Walnut Creek alone and over 2000 fish had been captured in the weirs at the mouths of the tributaries to the lake where the fish had been originally released.

Water temperature was now dropping rapidly in the big lake, but the rest of the story must wait for the February issue of the Angler.

ONE LUCKY angler holds up coho caught during early October.



Making split bamboo fly rods is a fading art. Learning the exacting methods for making a rod as well as selecting the material can take a long time and even once learned turning out the rods is a time consuming process. One of the few who know the art is . . .

Beaver County's CUSTOM ROD MAKER

by DON PARRISH
Waterways Patrolman
Beaver County



RODMAKER Joseph Kovach planes selected bamboo while wife Marge puts the finishing touch to a custom rod by hand wrapping the guides.



IF YOU WISHED TO BUY a custom, hand made, split bamboo fishing rod in Pennsylvania, where would you look? In the mountains of rugged Tioga County? Perhaps, in the wild setting of Potter? Your efforts in these areas might be in vain but in Beaver County the angler can still find this cherished of all fishing rods.

Here, in the heart of a highly industrialized area, lives a master of a dying art. Joseph Kovach, age 52, of Monaca, skillfully turns out the finest bamboo rods a sportsman ever had the pleasure of handling. To Mr. Kovach's knowledge, only one other person in the United States possesses this gifted talent—a woman somewhere on the West Coast!

It is surprising how many people think a bamboo rod is just a solid piece of bamboo. They couldn't be farther from the truth. The term "split bamboo" is the clue. Each segment of the rod is composed of six strips bound together.

Putting together a bamboo rod requires plenty of patience because of the close tolerances and exactness that must be achieved to perfect the finished product. This "know how" comes easy to Joe Kovach who is employed as a surface grinder by the Pittsburgh Tool Steel Wire Company.







THREE of the many steps in making a bamboo rod—Raw material is first split (left); then checked of strength (right); finally hand straightened (far right).

Permit me to use a hackneyed expression, "a man is only as good as the woman behind him!" Joe's wife, Marge, plays a very important part in the rod making process. After Joe completes his work of construction, Mrs. Kovach adds the finishing touches by putting on the line guides and tips. Joe admits, "she is the biggest part of the operation. If Marge would quit wrapping and varnishing, I would have to give up making them!" The Kovachs also repair all types of fishing rods.

Like any other hobby, Joe Kovach's rod making hobby had to start somewhere, sometime. He had only one instructor and no textbooks entered into the learning. Joe learned the art from an elderly man who lived on the Neville Island portion of the Ohio River above Pittsburgh. The man, George Sipler, now deceased, began the trade as a lad of twelve around the year 1900. A railroader taught Mr. Sipler a talent which later became his sole means of support.

In March, 1962, crippling arthritis forced Mr. Sipler into retirement. Joe Kovach was selected to carry on the old gent's profession. To show his gratitude, Joe turned over all monies realized until Mr. Sipler passed away in 1967.

Under the tutoring of Mr. Sipler, Joe worked three nights a week for two years to learn the art. The first three weeks were spent in minor repair of rods. Joe then graduated to fiberglass and served an apprenticeship of four months before moving on to the coveted goal of the bamboo technique. The end result . . . a rod better than most. The product journeys from China to the Kovach's basement and comes to rest in the hand of a happy fisherman.

The pain-staking, but enjoyable, process begins with Tonkin bamboo tubes from Kwang Si, China. Preliminary steps involve splitting the tubes, straightening the grain, or "power fibers" and planing the strips to size.

Next comes pressure gluing, varnishing, and locating the guides and tips. Sound easy? It requires 50 to 60 hours of tedious work involving precision accuracy comparable to watch repair.

From the very beginning, Kovach's rods have an advantage over many manufactured outfits. Joe explained some manufacturers split the 2½ inch bamboo tubes with a saw. He uses a big butcher knife. "When the tubes are sawed and the strips not straightened, some of the power fibers are broken and the rod is not quite up to par," he said.

Power fibers spiral around the circumference and when manufacturers cut the tube some of the fibers are broken and the rod is weakened. In Kovach's process, the power fibers are straightened with heat—no easy task. The strips, ranging from one-half inch wide down to one-sixteenth, are straightened by using an old steam kettle. A rather primitive—but effective—method.

After the strips are straightened, they are planed. A jig is set for the correct size and exact 30 degree angles. Each strip is then planed by hand. Since the strips are razor sharp, gloves must be worn. Joe goes through several pairs of gloves each winter.

When the planing process is completed, there are six strips for each segment of the rod. The nodes, or growth knuckles are completely smoothed and the rod is ready for gluing. The greatest of care is taken to stagger the nodes for added strength.

Joe fits the six planed pieces of the segments together precisely and bundles them in tape. He then cuts the tape lengthwise, lays open the bundle and paints the strips with weldwood glue.

The bundle is reclosed and wrapped with two layers of cotton string in a pressure gluing machine that exerts 200 pounds of pressure on the joints. Cotton is the only type of string used because any other kind won't hold the rod together due to flattening and separation occurs.

After the wrapped segments are left to dry for five days, they are unwrapped and hand scraped. Kovach then sands the rods, drills cork handles, installs a reel seat, and puts on the ferrules (the metal connecting joints between the two segments.)

The rod is now ready for Mrs. Kovach to add the line guides and tips. Nylon thread is used to fasten the guides to the rod. After each wrap, Marge coats it with color preserver, permits it to dry a half day prior to varnishing the segment. The varnish is applied in two coats with the fingers. Fine double-ought sandpaper is used if the first coat contains any imperfections. Varnishing is necessary to prevent softening of the power fibers caused by air penetration. I might add, Joe's wife also learned her part from Mr. Sipler.

Is all this worth the effort for a fishing rod? Kovach sums it up by saying, "the rod should do the work, especially when a fisherman is using a fly rod and has only the weight of the line working for him."

One expert said, "store-bought rods have good action, but Joe's have excellent and quick action!" Another advantage—they weigh only half as much as the same size store-bought rod.

Joe turns out about three rods per winter due to his limited time. The hobby is seasonal because of the intense heat. He cautions this hobby is not for the novice. Many try, but don't succeed.

Do the Kovachs fish? You bet they do! With what? What else!—bamboo rods made for, and by, Mr. and Mrs. Joseph Kovach!

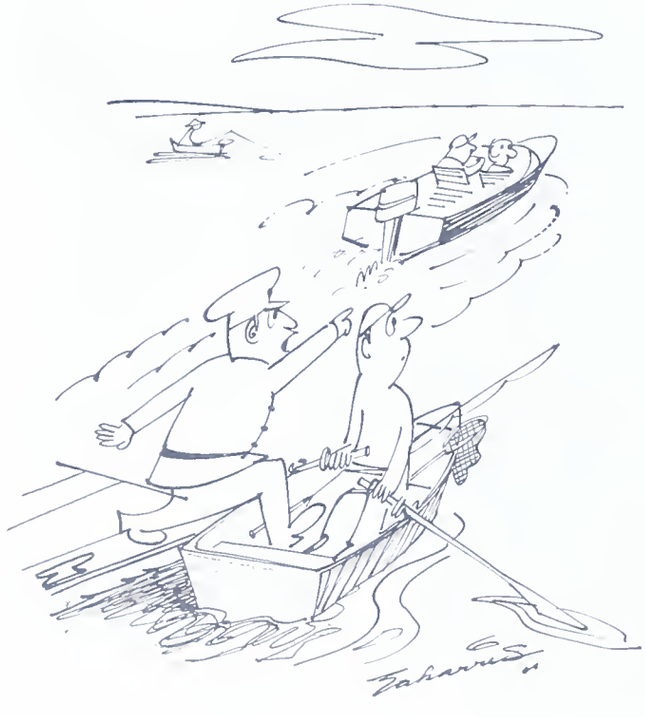
Notes FROM THE STREAMS

THREE IN ONE

■ While checking ice fishermen on a small pond I came across three small boys about 12 or 13 years old all fishing in the same tip-up hole—they had placed three tip-ups in the water with the tip-ups crossed. When one of the flags went up, it took some doing to land the fish and untangle the lines. I asked why they were all using the same hole and not each one using a hole by himself. They said "If you knew how long it took us to chop this hole you'd know we'd be too tired to fish if we had to chop two more." The ice was 23 inches thick and they were using an ax to cut the hole.—***Waterways Patrolman JOSEPH E. BARTLEY*** (Lake Wallenpaupack District).

NOT DRUNK—JUST GUILTY!

■ On routine boat patrol on the Allegheny River I was following a boat down river for no reason other than he was going the same way as I. The operator kept looking over his shoulder at me and all at once he started to throw cans into the river—some where floating and some made a splash and sunk as if they were full. I stopped the boat and the fellow said "I'm guilty but I'm not drunk," and with this answer I thought maybe he was. I gave him his copy of the boarding form and he started cussing and got that red and blue color about the face and neck. I asked what was the matter. He said "you're arresting me for littering?" I explained that was true, and he started cussing again. Then he said that when he saw me following him he thought he wasn't permitted to drink or have beer aboard while operating a motor boat so was getting rid of the evidence—full ones and all.—***Waterways Patrolman ARTHUR A. HERMAN*** (Westmoreland County).



"FOLLOW THAT BOAT!"

ONE HOOK—TWO FISH!

■ John Kelly of Galeton told me he and some friends decided to take a picnic and fishing trip to Beechwood Lake. John said he baited his hook with a worm, set his rod and proceeded to eat a sandwich. Soon he noticed his bobber move and realized that he had a light strike but he didn't try for the catch. In a few minutes then he had a heavy strike. He grabbed his rod and set the hook. Much to his surprise he landed a 10 inch bass and in the throat he found his original strike—a four inch perch. John said that was the first time he had ever caught two fish on the same hook!—***Waterways Patrolman KENNETH ALEY*** (Potter County).

NO CHANCES—

■ One evening while on general patrol on Nyce's Pond, I watched two men fishing without their licenses displayed. As I started over to check them, I saw one carry several fish into the brush about thirty feet away from where they were fishing. Upon checking them I found that they did have fishing licenses. However one of the men told me they hadn't caught any fish. When I explained to them what I had seen, they conceded to catching several fish and then led me to where they had hidden them—only to find four beautiful yellow perch in the 12 to 14 inch class. I then asked why they hid them since they were legal. His reply was "I didn't know whether or not mackerel were legal or in season in Pennsylvania."

I then told him they were perch and advised him to attend one of the Pennsylvania Fish Commission's fishing schools this fall.—***Waterways Patrolman MICHAEL BADNER*** (Pike County).

DOUGHNUTS!

■ While patrolling the North Branch of the Susquehanna River, accompanied by W. P. Richard Roberts of Montrose, we had the misfortune of rupturing the O ring in the gas line. Being about three miles from our car we decided to try and borrow one.

In this area the O ring is more commonly called a doughnut, so the first boat that came by I asked the operator if by chance he had an extra doughnut? He said he didn't have any at the moment, but in a few hours he would have thousands of them. He drove a bakery truck and had to report to work in a few hours!—***Waterways Patrolman STEPHEN A. SHABBICK*** (Wyoming County).

SPORTSWOMAN!

■ I have had occasion to check a lady fisherman on the Allegheny River a number of times during the past two years. She and her husband do quite a bit of fishing and hunting and have traveled all over the world in pursuit of their sport. The lady has taken at least one grizzly bear in Alaska and a few years ago she bagged a lion and a leopard among other game in Africa. Recently, she was sitting on the bank of the river with a crutch at her side and her foot in a cast. She explained that while she was sitting on her own porch a field mouse ran out from under the glider and in her haste to flee the mouse she broke her toe on the door step. Women are still the hardest creatures in the world to understand!—***Waterways Patrolman GEORGE R. JONES*** (Warren County).

WELCOME GIFT!

■ At the August meeting of the Jefferson County Federation of Sportsmen Clubs the group presented this officer with a new pH water testing kit. The kit will be used to detect pollutions as well as for pond and stream investigation work. The money for the kit was raised through displays set up by the Jefferson County sportsmen. Thanks! —***Waterways Patrolman JAMES F. DONAHUE*** (Jefferson County).

STILL THERE!

■ During August I spent some time with the U.S. Fish and Wildlife Service taking stream surveys of many water areas within the Allegheny National Forest, both in Elk and McKean Counties. The survey consisted of electro shocking given stretches of selected streams. Many, many trout were observed ranging in size from 7″ to 21″. Oh yes, the fish were returned to the streams unharmed for next year!—***Waterways Patrolman BERNARD D. AMBROSE*** (Elk County).



"I REALLY DIDN'T MEAN TO DROP YOUR ROD OVER THE SIDE."

NEW PREDATOR?

■ While working the Woodsmens Carnival with Waterways Patrolman Aley, a man asked if I had read the article in one of the leading outdoor magazines, pertaining to deer eating fish. He said the article explained how the whitetail deer would stomp fish in our small streams and eat them. I informed him that I had received no complaints, but perhaps we should add the deer to the list of predators and pay a bounty as this could be detrimental to our trout population.—***Waterways Patrolman STANLEY G. HASTINGS*** (Cameron County).

TRAVELING TROUT

■ Special Warden Scholl told me the following story. He has checked on five brook trout which were caught on the Lower Tunkhannock Creek near Blakeslee. These fish were tagged by a private club and in the period of about 2½ months, had traveled about 5 miles before being caught. At the same time, during the first week of the season, I checked and was told about sixteen trout being caught that were better than 20 inches in length. Most were caught on the Brodhead and the Pohopoco Creeks.—***District Warden WALTER J. BURKHART*** (Monroe County).

STONE "SNAPPER"

■ While working at the Commission display at the Indiana County Fair a girl about 18-years-old came over to the booth where I had a young snapping turtle on display in a glass bowl. She looked at the turtle awhile and then said that she would pick up the little turtle but not the big turtle that was "sleeping." She did pick up the small snapper but was afraid of the big one. I was pretty well in hysterics by this time but I didn't have the heart to tell her—the big one was a stone I had placed in the bowl! —***Waterways Patrolman ALLEN G. STIFFLER*** (Indiana County).

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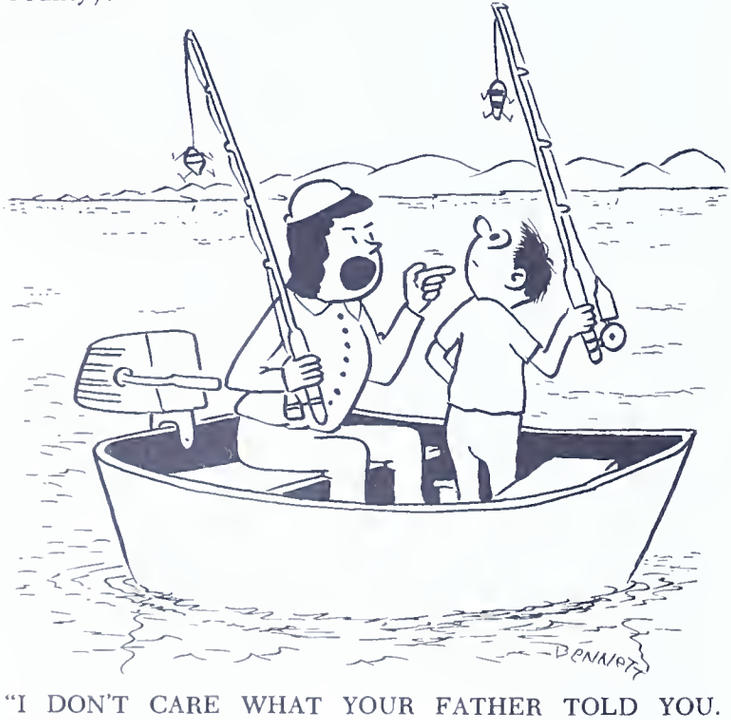
STREAM NOTES

SEASICK BOATER

■ Deputy Boor and I were checking boats on Glendale Lake and were in the process of filling a boarding form. This particular boat had four persons aboard—two men and two women. As I was checking the equipment, one of the ladies remarked that she had been feeling fine when they were moving, but now she was beginning to get "seasick." Without saying anything I handed her a litter-bag, then completed the boarding form. She must have forgot that she was sick because she didn't have to use the bag and was still laughing when I pulled away.—***Waterways Patrolman ANTHONY MURAWSKI*** (Cambria County).

THIN ICE

■ While conducting an ice fishing clinic last winter near Elizabeth at the Orchard Lake Hatchery, Patrolman Sowers and I saw what we considered to be an extremely hardy individual. The weather had warmed up several days before we gave our demonstration and the ice on the lake was getting thin in spots. One man who decided to fish near a thin spot gave the ice about two good whacks with his spud bar when the ice around him gave way and in he went up to his chest. In his excitement, he lost his spud bar. After being pulled to safety, he realized his loss and went right back to the spot where he had fallen in only this time he jumped in and retrieved the spud bar. He later explained that he was already wet and a little more water wouldn't hurt him a bit.—***Waterways Patrolman JAMES R. SMITH*** (Southern Portion, Allegheny County).



"I DON'T CARE WHAT YOUR FATHER TOLD YOU. LARGEMOUTH BASS ARE NOT ALL FEMALES."

"INHUMAN" GIFT

■ Seems Special Patrolman Rebar had two pickerel to dispose of. He decided to give them to a lady in the town of Olyphant and everything went smoothly until the woman started to clean them. Then the fun started. Special Rebar was home relaxing when the phone rang. Upon answering it he found on the other end of the line the woman who had started to clean them. Seems while she was cleaning the fish, she found two baitfish in the stomach of the pickerel and thought they were baby pickerel! —***Waterways Patrolman ROBERT E. FASCHING*** (Lackawanna County).

ICE BREAKER!

■ The Allegheny River wasn't frozen solid but the shore ice along the Sand & Gravel Island at Tionesta was about four inches thick and extended out into the river about 40 feet. On a law enforcement detail last winter accompanied by Special Waterways Patrolman Kenneth Kahle, we met Mr. Chuck Burke of Mars, and Gerry Merz, of Pittsburgh, who had traveled some distance to fish this day, and they were bound and determined that a little ice wasn't going to stop them. When I arrived on the scene, they were using the winch cable and hook on their truck to break up the shore ice. They slid the hook along the ice until it dropped over the edge; then they started the winch on their four-wheeler, slowly tightening up the cable until a piece of ice broke off.

Two hours later, they had a place cleared for fishing and six hours later they were still in the same spot. They hadn't caught a fish, but they were happy and they were proud that they had outsmarted Old Man Winter!—***Waterways Patrolman JOSEPH KOPENA*** (Forest & Clarion Counties).

GRANDMA'S SPRING?

■ It seems a young fisherman had caught a very nice rainbow trout and since it may have been his first he ran happily home with it in a pail of water. He proudly presented it to his father whose first words were "very nice trout, we'll have him tonight for supper." The boy couldn't face cleaning this thing of beauty, so his dad told him return him to the creek. The boy returned to the stream with pail and trout. Later that evening father and son visited a local sporting goods store. Naturally conversation turned to fishing and the large trout. The sporting goods dealer told the boy it was a shame he had returned the fish to the creek before registering him at the dealers as it was quite possible the trout would have been large enough for the boy to receive a Pennsylvania Angler Citation. Well the boy took off like a shot and very shortly

water pail, boy and trout returned and sure enough it was Citation size. It has been speculated as to where the lad had kept the fish but I'm betting on grandma's spring! —*Waterways Patrolman SAMUEL W. HALL* (Lancaster and Lebanon Counties).

DANIEL BOONE

■ A most unique award, at least for an officer whose main responsibility is water—I had recently the esteemed pleasure of receiving a most coveted award from the York Chapter of the IWLA. The Chapter saw fit to present me with the Daniel Boone Award and one beautiful *real* coon skin cap. May I say "thanks" gentlemen and may I remain in that light till my job is done!—*Waterways Patrolman H. PORTER DUVALL, JR.* (York County).

NO "FISH STORY"

■ Lester M. Henry, of Paradise, is 74-years-old and retired, and he really catches his share of fish. As of the end of July Mr. Henry has caught 1,590 crappies this year! This is no "fish story" as I have seen many of his limit catches—he is doing a fine job helping to keep the crappie population in balance in the Chester-Octoraro Reservoir. —*Waterways Patrolman RAYMOND A. BEDNARCHIK* (Chester-Delaware Counties).

NATIONAL CHAMPS

■ This year marks the fourth time since 1960 that the Bedford Elks has won second place in national competition. The first step in winning the recent honor was capturing first place in "youth activities" competition in Pennsylvania. The Bedford Elks has won the state honor on numerous occasions with programs including a fishing rodeo with the help of the Pennsylvania Fish Commission, golfing events, fishing instruction given in the Fundamentals of Fishing course conducted by the Commission, cheerleading contest, foul shooting contest, grade school basketball, as well as junior high wrestling and bowling. I am proud that I and the Pennsylvania Fish Commission, played a small part in helping this energetic group with their program. And thanks to the Elks for helping us conduct our fishing schools!—*Waterways Patrolman WILLIAM E. McILNAY* (Bedford and Fulton Counties).

SICK COLOR

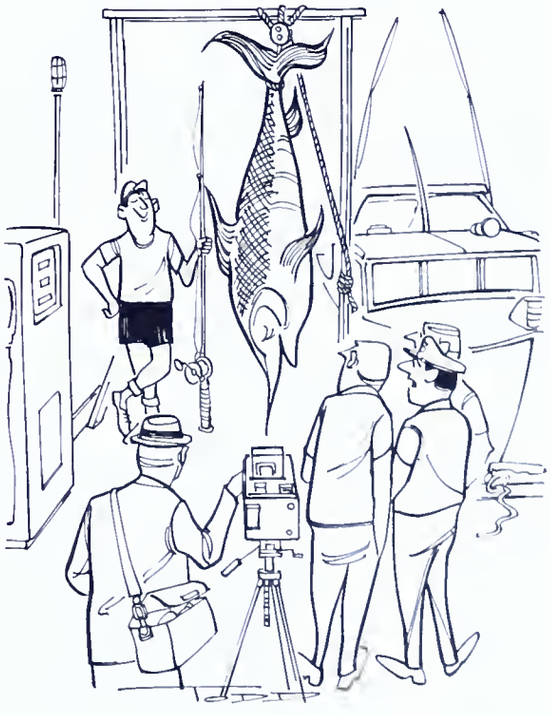
■ The following story was told to me while I was stocking Mill Creek this year. Last year 20 palominos were stocked in Pine Creek and many anglers did not know what they were. An Angler caught one on opening day and not knowing what it was for sure told his fishing partner "I caught one that must be sick. It is changing color and it is not dead yet." This year he knows what they are!—*Waterways Patrolman RAYMOND HOOVER* (Tioga County).

KEY CATCHER

■ While at the Canfield Motel in Ohio I talked with a lady that runs a motel. She told me of a new fishing idea. It seems the occupants of the room left their keys inside the room when they checked out. Having a friend that fishes came in handy for the motel owner. They raised the window a little above the air conditioning unit and used a fly rod with a hook to catch the keys. The pass key would not work and they would have had to break a window to get in otherwise.—*Assistant Supervisor CLOYD W. HOLLEN* (Region One).

CALL ANYTIME—

■ At 3 A.M. Saturday, last February 8th my telephone rang persistently. With one eye open I answered the phone. The caller asked where he could buy a fishing license on Sunday. My first reaction was that some sportsman had been celebrating the opening of trout season a little early and was under the influence. However I, of course, gave him the information. While checking fishermen on the North Fork Creek Fish-For-Fun area the following day, I was greeted by the caller who soberly thanked me for the information.—*Waterways Patrolman JAMES F. DONAHUE* (Jefferson County).



"TALK ABOUT LUCK . . . ONLY LAST WEEK HIS WIFE LEFT HIM!"



FLY TYING FEATURE

Damselfly Nymphs

by
Chauncy
K.
Lively

MOST FLY FISHERMEN carry artificial nymphs representing the larvae of mayflies, stoneflies and caddisflies—and less commonly, midges. One of the nymphs neglected by many anglers is the nymph of the damselfly and it's one that can be extremely useful, both for trout and bass.

Like dragonflies, damselflies belong to the insect order Odonata. The adults of both are sometimes called "flying darning needles" because of an ancient myth that they sewed up the ears of truant schoolboys. Both are four-winged flies, the damselfly being the smaller and less speedy flier of the two. At rest the adult damselfly holds its wings together on edge over its back, while the dragonfly's wings are extended outward, as in flight position.

Damselfly nymphs are common in both streams and lakes, where they live in mud or detritus along the edges. They are great foragers and crawl haltingly along the bottom or through aquatic vegetation to prey on lesser insect larvae. They are slender in body and have three external leaflike gills at the posterior end of the abdomen. Fullgrown, damselfly nymphs are about an inch in length and the coloration is generally dark olive, light olive or gray.

A familiar damselfly around Pennsylvania's waters is the Blackwing, of the genus Agrion. Adult Blackwings are descriptive of their name, having smoky or rusty black wings and thin bodies of metallic blue or green. The Blackwing nymph pattern we are going to tie is representative of several species of damselflies and the pattern may be changed by varying the body coloration from dark to light.

Our pattern calls for external gills of grizzly hackle tips, tied in to the hook like tails. As most fly tyers know, good quality grizzly hackle is becoming difficult to come by and the cost of a choice grizzly neck these days is like a touch of high living. Being Scotch, both by nature and lineage, I've found the inexpensive cape of a Plymouth Rock hen to be perfectly satisfactory for any use, other than dry fly hackle, where grizzly is required. Thus, if I need two hackles for the wings of an Adams, or three for Blackwing nymph gills, I don't have to deplete my limited supply of prime grizzly hackle.

The fur used for body dubbing is dark olive brown and the color is achieved by mixing two parts brown Hudson seal fur with one part olive angora yarn, plucked from the skein. An easy way to mix the fur dubbing is to pick a small amount of seal fur from the hide and drop it into a small receptacle, such as a coffee can lid. Then pull apart the proper proportion of angora yarn and stir it into the seal fur with a dubbing needle. If the angora is longer fibred than the seal, it's a good idea to keep pulling apart the mixed bundle and re-mixing it until a uniform shade is reached.

Damselfly nymphs have large heads and prominent eyes, represented in the Blackwing pattern by enclosing a piece of chenille in an extension of the wing case, a method used in the March Brown nymph pattern described in the ANGLER'S April, 1969 issue.

Damselfly nymphs are particularly effective in the weedy areas of the limestone streams and I've taken some fine trout in streams like Big Spring, fishing the nymph along the beds of elodea and watercress. In lakes, for bass and large panfish, I like to fish the Blackwing nymph in the openings among the weed beds, allowing it to sink deep and retrieving it in short, slow strokes along the edges of the vegetation.

The nymph should be tied on a 3x or 4x long hook. For bass I like to use a size #10; for trout a size #12 seems to be the better producer.







TO TIE A BLACKWING NYMPH:

1. Glue two short lengths of 20 lb. nylon monofilament to opposite sides of the fore part of a size #10, 3x long hook. Monofilament should be roughly ⅓ length of hook shank. This forms the thorax platform. Then attach tying thread to hook behind eye and wind closely to bend. Half-hitch.
2. For posterior gills select three short grizzly hackle tips and tie in on edge at bend. Wind thread over hackle stems and spiral forward to thorax platform.
3. For ribbing tie in a three inch length of brown buttonhole twist (thread) behind thorax and wind tying thread over ribbing to base of gills at bend. Half-hitch. Trim off excess ribbing as shown.
4. Apply tacky wax to about two inches of tying thread. Sparsely apply a dubbing of mixed brown Hudson seal fur and olive angora yarn (see text) by rolling fur around thread between fingers.
5. Wind dubbing forward to thorax platform and half-hitch. Now wind ribbing forward in spaced spirals in opposite (counter-clockwise) direction. This prevents ribbing from burying itself in fur. Tie off ribbing where dubbing ends and half-hitch. Trim away excess end of ribbing.
6. For wing case cut a section of gray goose quill slightly wider than thorax platform. Bind thin end of quill to thorax, allowing butt end to extend over bend of hook. Coat both sides of quill with vinyl cement as shown.
7. For legs cut six individual fibres from a large, brownish wood duck flank feather. Knot each fibre to represent leg joint.
8. Invert hook in vise and set the legs in quick-dry cement on the underside of the thorax platform. Wind tying thread over leg butts and half-hitch at rear of thorax.
9. Release hook from vise and replace in normal position. Trim ends of legs to proper length. Again wax a short length of tying thread and dub with mixed fur as in Fig. 4. Wind dubbing over thorax platform, being careful to avoid moving position of legs. Half-hitch thread behind eye.
10. Pull quill wing case over top of thorax and bind down with two turns of thread behind eye. Half-hitch.
11. Lay a short length of medium-size black chenille over quill in front of thorax. Holding chenille in place, pull quill back over chenille and take two or three firm turns of thread over quill just behind head, as shown. Trim away excess quill close to windings. Trim chenille close to head to represent large, black eyes. Whip finish tying thread behind hook eye and cut thread. Apply a drop of cement to exposed windings and to each chenille eye.
12. Completed Blackwing nymph—opposite page.

















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SEA BAG

approved cushion, $4.75 to $6; wide-angle rear view mirror, $6.75; or for use around the house a set of place mats, $10, decorated with upland birds, ducks, waterfowl or the America Cup Series.

If your husband or boy friend is a sailing enthusiast he's always interested in weekend wind conditions. Consequently a wind indicator, $69.50 to $159.50, would be a welcome gift.

A brand new bow light can be purchased for $4.95 to $8.95; windshield wipers, manually or electrically operated, $8.25 to $28.95; stern pole lights, $8.50 to $16; and searchlights range in price from $11.25 to $44.95.

Air horns sell for $7.95 to $30.50; electric horns, $8.95 to $49.95; boarding ladders, $10 to $30; and to make moving a loaded trailer as easy as possible there are several tow jacks which sell for $23.95 to $29.

Buoys sell for $10.95 to $37.95; motor covers, $14 to $39.25; and for the boat owner who likes to keep his battery in tip-top shape there's a charger pack which retails for $22.95.

Ideal accessories for the boat itself would include a compass, $9.95 to $150; fish finder, $140; tachometer, $22 to $45.50; marine clock, $18.50 to $29.95; barometer, $13.95 to $15; an engine hour meter, $24.95 to $28.95; or a speedometer, which dealers claim to be a good seller, $9.95 to $15.95.

This gives you some idea of what's on today's market and if the prices quoted are still a bit steep why not settle for a mounting plate for the bumper or grill of your friend's auto, which sells for $1.50; and three code flag initials for 35 to 65 cents each. Of course if you choose the latter make sure that you get the right initials.

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"PUMPER" is used to dislodge rocks and debris from the remains of a wreck.

LAKE ERIE'S TREASURE

to distinguish between what's proven, what is merely possible, and what is highly improbable.

Even if the amateur scuba diver doesn't find gold and silver or other valuable caches, he can partake of the salvage money offered on hundreds of sunken ships of more modern vintage by the maritime insurance companies. Rewards are often offered for just an accurate marking of the resting place of a wreck, substantiating a reasonably close area and position for possible recovery later.

But scuba-diving treasure seekers planning to engage in actual lake-bottom search want to know exactly *where* and *what* to look for. In a great number of cases, this information is actually known, recorded and pin-pointed. In the listing accompanying this report are some of the most prominent wrecks which still contain valuable cargoes, as yet unrecovered.

However, before one's adventurous temperature turns to underwater treasure fever, it is well to point out some of the hazards and frustrations of such escapades. No amateur should risk diving in any type of scuba gear until thoroughly schooled in how to use scuba or other underwater equipment. Location of the wreck can be difficult, despite pinpoint directions. Charts and maps put out for the unwary treasure enthusiast, purporting to show exactly where these wrecks rest, usually are prepared by persons who have never actually made a search of recovery. These maps are a flourishing item on the market, frequently advertised in reputable magazines and newspapers. The spot of ink or number that marks the exact location of a shipwreck might cover ten or fifteen square miles of lake area, and is quite useless to a serious-minded salvor. True and substantiated sites of wrecks can be obtained only from original documents, professional salvage experts or firms, or—often—from local custom houses, whose records may be kept indefinitely.

For the capable swimmer, only the simplest of diving equipment is needed in treasure-searching: face masks, fins, compressed air tanks and air regulator, and various accessories, which can be purchased at any aqua-lung shop from $250 up, depending whether one wants an ordinary or deluxe apparatus.

The depth to which a scuba diver is capable of descending is limited to about fifty fathoms (300 feet) maximum, and even 200 feet can be dangerous. Most qualified scuba divers can seek treasure in lake waters with reasonable safety above the 200-foot mark; all of the examples listed in the accompanying listing are above this mark. The expert scuba enthusiast never permits his zeal for discovery to carry him beyond the dictates of safe practice; the sport is excellent recreation but it demands sound experience and intelligent habits. A negligent scuba diver can get in much deeper than expected, and for this reason a depth-gauge and compass combination is an important piece of equipment for any but shallow waters.

But even with all hazards and preparations considered, there is no question whatever of the practicability of treasure-seeking in the waters of Lake Erie. The techniques of scuba apparatus for fun *and* profit can lead to astonishingly material rewards—perhaps even gold and silver, perhaps relics or artifacts, perhaps merely a fascinating closeup look at a slice of history.

There are hundreds of sunken hulks in Lake Erie, stretching from the east end at Buffalo and westward along the shores of New York, Pennsylvania, and Ohio, and northward for the entire length of Ontario, like a long, rusty chain. Their submerged treasures are available to anyone who wants to go down after them.

Good treasure-fishing. . . .

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HUNTING FOR FISHING

He was now off the hook, smiling as he shook hands with me to signify the end of the meeting.

I knew there was something wrong the moment I produced my fishing license to the hotel manager at Stary Smokovec. First he put on his spectacles and this convinced me that he had never even seen one of these forms in his life before. Then he went to consult the receptionist who knew less about local fishing spots or the regulations than any pretty female hotel receptionist in Scotland, Denmark or Pennsylvania. But the hall porter knew *something* about it. He said, "You must take this to the offices of the Tatras Mountain Conservation Bureau, sir."

"Where's that?"

"The next village."

"Then what happens?"

"They will tell you if you can have permission to fish in the area."

"But *this* is permission to fish."

"Oh, no, sir," he smiled tolerantly. "This is your *national* license. It is mostly the trade unions who own the fishing rights of the waters."

"The *what*?"

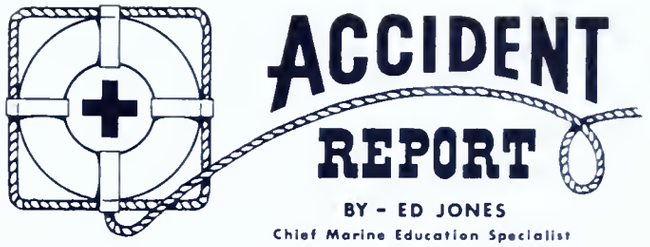
"Yes, sir. And the Tatras Mountain Conservation Bureau will negotiate your right to fish their waters."

So we motored to the next village, asked ten people where we might find the Bureau, got misdirected to a local museum, two hotels and what looked like a village marriage guidance council. Then we found it.

The two men I saw there looked even hunt-ier and fish-ier than the tweedy man in Prague. They wore forest-green uniforms and big tackety boots and they were very understanding. After much head-shaking and mumbling in Czech or Slovak they told me in German to go to a certain village twenty miles away, turn right just before I enter the village, follow a dirt-road for three miles, skirt a farm, cross a railway bridge (with weight limit) and stop at a small forester's house with a black timber roof. I had to present the man in the house with a Special Note (given to me in a sealed envelope).

We found the Man in the Black-roofed House. It took us four hours, two guides, six packets of British cigarettes and three enquiries in stilted German before we were standing at his door. As I handed the Special Note to him I got the horrible idea that it might contain a message in Czech, "Shoot him!"

My fishing lasted one hour. The river was swollen, yellow-coloured and looked as if no fish had seen its waters since the invasion of the Turks. I tried flies, spinners and spoons on its thundering, rushing torrent and gave up to have tea and take some photographs in consolation.



BY - ED JONES
Chief Marine Education Specialist
Pennsylvania Fish Commission

COLLISION WITH ANOTHER VESSEL remains the leading type of accident in the Commonwealth of Pennsylvania as well as in most other states. Pennsylvania boaters were involved in 51 collisions in 1968 resulting in one death and 40 injuries. These figures do not include groundings, collisions with docks, fixed objects, shorelines, etc. These are strictly collisions between two or more vessels!

A collision does not "just happen." It must be caused by the boat operators. Most collision type accidents are due to the operators not keeping a proper lookout. The operator must keep himself aware of what is happening, not only in front of his vessel but on each side and astern also. Keep in mind that when you take the helm of any vessel, whether it be an ocean liner or a 14 foot outboard on the Susquehanna, the responsibility is yours alone for the safety of your passengers and your vessel. The Rules of the Road make no distinction between sizes of vessels. All vessels must obey them.

When we meet an automobile driver on the road who is obviously a poor driver we usually feel a resentment toward this person as we mutter under our breath, "Who taught him to drive," or "Where did you learn to drive?"

In the meantime however, all over the United States people are climbing into high speed motor boats, taking their families with them, and heading into areas where there are no road signs, traffic lights, nothing to guide them but their own know-how and experience.

Unfortunately there seems to be a severe shortage of these last two items.

All boaters—experienced as well as inexperienced—should take a boating course with one of the several agencies offering these courses. These include the U.S. Coast Guard Auxiliary, the U.S. Power Squadrons and the Pennsylvania Fish Commission. All courses are free, but are thorough and are fun. They can save your life or the life of one of your loved ones. They could also keep you from killing or maiming someone else.

To know the "Rules of the Road" is surely an asset and as a boater you should have a basic knowledge of them. Your two greatest defenses against accidents are common courtesy and consideration for other people or boats. Too much speed for existing conditions is still a contributor to collisions for just as we have the hot rodder ashore, we also have the same character afloat. And his machine is every bit as deadly, but usually to the other guy. To avoid collisions be aware of what is happening around you. Be prepared to act and to react. Be sure that you are right. And do not rely too heavily on the other boat to always do the right thing!

MODERN CAMPING by DEL & LOIS KERR

WORLD'S END STATE PARK

SULLIVAN COUNTY, the second most sparsely settled of any of Pennsylvania's sixty-seven counties, offers a wealth of outstanding scenery.

Not the least of these scenic attractions is World's End State Park, located along Loyalsock Creek on Route 87 a mile south of Forksville. The 1,606-acre park is nestled in a deep canyon at the base of steep mountainsides.

In the heart of the park, Loyalsock Creek is forced into a perfect "S" shape by the rock ridge and sheer cliffs. Years ago a violent whirlpool filled the second curve.

In the 1930's a Civilian Conservation Corps dam converted the dangerous hazard into a lovely swimming area which offers room for hundreds of swimmers. Entering the park by Route 87 you will pass this swimming area before reaching the park office where you secure your camping permit.

The 70-site campground is located east of the office off Route 154. Water and pit toilets are centrally located to service all sites. A limited supply of canned goods, refreshments, ice and souvenirs are available at the concession near the park office.

Nineteen rustic cabins are also available on a one-week rental basis. Applications for the summer months are accepted by mail after January first. Off-season rentals run from April 14 to the end of May and from Labor Day to December 20th. These reservations may be made after August 15. Campers using the cabins must supply their own eating and cooking utensils, linens and bedding.

From a mountaintop rim, campers can view the park and Loyalsock Creek. This lookout can be reached by either Mineral Spring or Cold Run forest roads or by foot on the Canyon Vista Trail.

High Knob Overlook, nine miles west of the park, offers spectacular panoramic views of the surrounding mountains and valleys. In autumn the colorful foliage is extremely attractive, as is the mountain laurel in the early part of June.

Anglers can fish in the waters of Big Loyalsock Creek right at the park where both trout and warm water species are found. Numerous trout streams dot the area.

About ten miles west of World's End is Lake Makoma which offers boating, swimming and fishing. Ninety-acre Hunter's Lake, in the southwestern part of the county off Route 42, is stocked by the Fish Commission. Your lure might attract smallmouth or largemouth bass, walleye, trout, perch, pickerel, sucker or bullhead.

World's End acquired its unusual name from early settlers in the area. A "dug" wagon road circled the steep mountainside 500 feet above the Loyalsock Creek. Travelers from Muncy Creek to Forksville had to be mighty careful when negotiating this dangerous precipice with the deep canyon below. They felt as though they were indeed at the end of the world.

Hikers will find several forest trails throughout the area. One of the best-known hiking trails in the Commonwealth, the 50-mile Loyalsock Trail, maintained by the Alpine Club of Williamsport, passes through World's End State Park.

The trail begins ten miles north of Montoursville along Route 87 and follows ridgetops 1,000 to 2,000 feet high for most of its distance to Ringdale on Route 220. It passes such scenic attractions as lakes, waterfalls and beaver ponds.

By far the most outstanding features of this wilderness footpath, however, are the many scenic overlooks with vistas such as Kettle Creek or the Loyalsock Valley.

Most of the trail is open to camping for backpackers and there are also several marked camping spots. Information and maps can be obtained from the Alpine Club of Williamsport, P.O. Box 501, Williamsport, Pa. 17701.

Campers at World's End can purchase supplies in nearby Forksville and enjoy the unique experience at the same time of crossing the creek through one of the few remaining covered bridges in the state.

The fairgrounds at Forksville host the Sullivan County fair, usually held during August. In September the Pennsylvania Bowhunters Festival is held there featuring life-sized running deer targets, animal calling contests and wild boar hunting.

In the spring white water canoe races are held at World's End State Park sponsored by the Sullivan County Chamber of Commerce and the Wildwater Boating Club of State College.

The Sullivan County Historical Society operates a museum on the courthouse grounds which is open to the public Saturday afternoons in the summer months and other times by appointment for group viewing.

World's End is a very popular park generally filled to capacity weekends during the summer months. Private campgrounds are located nearby at Forksville and also at Dushore.

FISH TALES

A FISHING FEATURE FOR FISHERMEN —— FROM FISHERMEN



YOUNG Steve Zimmerman, 6 of Lebanon holds 17½ in., 2 lb. rainbow he caught opening day last spring at Lion's Lake in Lebanon County.



LESTER JACOBA of Hollsopple holds 5 lb., 10 oz. northern he caught at Hi Point Lake to win first place in a fishing contest held by Rich's Sporting Goods in Johnstown. Bait used wasn't listed.



SECOND PLACE in Rich's Sporting Goods contest went to J. L. McGee for this 4½ lb. northern. He caught it at Glendale Lake. Bait not listed.



LAKE WALLENPAUPACK is where nine-year-old Mark Miller of Carbondale caught this nice 19¾ in. brown trout to become a Junior Citation Winner. He was using spin gear and worms.



JOSEPH RAE of Hallstead holds a 17 in. rainbow and an 18 in. brown trout he caught at Quaker Lake in Susquehanna County late in May. Bait used wasn't listed.



CARL L. SMITH of Palmyra holds 11½ in. rock bass he caught while fishing the Juniata River. It hit a spinner and won the 13-year-old angler a Pennsylvania Angler Fishing Citation.

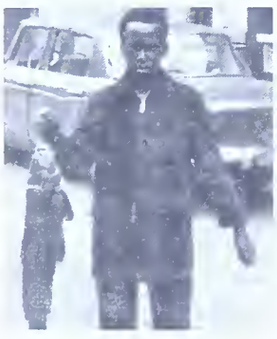
FISH TALES

A FISHING FEATURE FOR FISHERMEN ——— FROM FISHERMEN

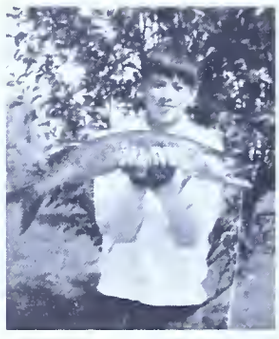




FISHERMAN JOHN PERRY (left) of Kittanning holds 44½ in. musky caught while fishing "near the bridge" in Kittanning. It was the third musky he had caught there that day. Eugene Belperio and wife Therasa (right) of Philadelphia hold four nice brown trout they caught fishing Lake Wallenpaupack last spring.







ANTHONY WILLIAMS of Harrisburg (left) holds 29½ in. carp caught fishing the Susquehanna near the York Haven Dam while Bud Crevar of Butler (center) holds 8 walleyes he caught (totaled 16½ lbs.) fishing Pymatuning near Harris Island. Matt Messmer, 11, of Erie (right) holds 31½ in. musky caught fishing Edinboro Lake.



GEORGE WRIGHT OF Akron, Ohio holds stringer of 4 walleyes and two bass he caught fishing Pymatuning Reservoir.





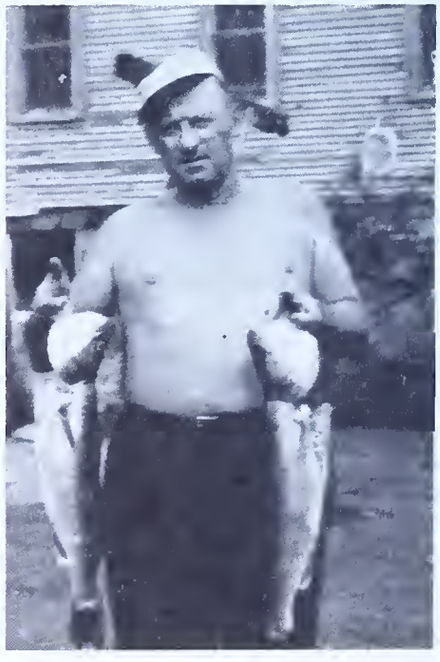
PHIL HERMAN, 16, West Middlessex (top) holds 28 in. northern from Shenango Reservoir. Steve Grayeske, Philadelphia (bottom) holds 27 in. walleye from Perkiomen Creek.



TERRY MIKLOS, 10, of Ford City holds 24 in. 5 lb. rainbow he caught in Buffalo Creek in Armstrong County. He won a Junior Citation.



LEO LUTTRINGER of Mechanicsburg holds a pair of 3½ lb. smallmouth bass he caught while fishing the Susquehanna River near his home.



HENRY ANSWINI of Wilkes-Barre holds pair of big walleye he caught while fishing Lake Wallenpaupack. One weighed 7 lbs.; the other 8 lbs.





WARREN PAYNE, Nescopeck (above) holds 39 in. musky from Lake Jean. Ed Crumlich, New Cumberland (right) 22 lbs., 44 in. musky caught while fishing the Susquehanna River.





TOM MLAKAR, 11, of Sharon (above left) holds 28¼ in., 4½ lb. northern he caught on Daredevel while fishing the Shenango River Reservoir. Another 11-year-old angler, Michael Swallow of Sharpsville (above right) holds 31¼ in., 8 lb. northern he caught on a Creek Chub also from the Shenango.





HOWARD STROUD of Athens (above left) holds 32 in., 7 lb. muskies he caught on a Rebel while trolling near the River Side Inn of Athens. Brian Carlson, 11, of Hunlock Creek holds 19 in., 3½ lb. largemouth bass he caught at Lake Henry in Wayne County. It took a green Jitterbug.



ALBERT BAGINSKI of Easton holds 30 in., 7 lb. walleye he caught on a Flatfish from the Delaware near Eddyside. It's his eighth Citation catch!



"HUCK" LININGER of Erie holds 7½ lb. walleye he caught August 16 in Lake Erie off Walnut Creek. Lininger also is credited with catching what was believed to be a rare blue pike.



JAMES BOWMAN, 12 (left) and unidentified friend with pair of nice brown trout. The one caught by Bowman measured 18½ ins., and weighed 2½ lbs.





MIKE MELHORN of York (left) holds 24 in., 4½ lb. walleye he caught on a minnow while fishing at Pinchot Park. Bill Aurand (right) of Burnham holds 18 in. smallmouth bass he caught from the Juniata River. Both boys won Junior Fishing Citations.





ERWIN NIEHORSTER of Philadelphia (left) holds 23 in., 6½ lb. largemouth caught at Washington Crossing Park in Bucks County. Don Wehrle (right) of Erie holds stringer of nice walleyes and perch caught from Lake Erie at Walnut Creek.

CASTING WITH THE CO-OPS

A MONTHLY FEATURE ABOUT CO-OP NURSERY PROJECTS

By BILL PORTER

COHO CO-OP

"LAKE ERIE COHO, up to 7½ pounds, are being taken offshore in the vicinity of Lake Erie tributaries where the coho were introduced." So stated the Pennsylvania Fish Commission's *Fishing Report* for September 30, 1969. But what does that have to do with the Cooperative Nursery Program? Plenty—that's what!

Perhaps you caught some of those coho? There were two sources for the fish. Some were reared by the Fish Commission; the others came essentially from two cooperative nursery clubs—the North East Hunting and Fishing Club and the 3 C U Trout Association. It is with this latter source that we are most concerned.

So let's take a little trip back into last winter with Bob Hetz, treasurer and nursery manager for the 3 C U outfit, as our host. First stop was the raceways of the North East Hunting and Fishing Club. At the Dean Nursery, we met Dale Pierce, club president, and "P.G." Andrews, an active member, who filled in the history with essentially a story of cooperation from a lot of sources.

The 3 C U people provided the Northeasters with steelhead and coho eggs and fry. Property owners, including the Deans and others, contributed land and resources. A former commercial fish grower, Bob Kolbe, turned over his 14 pond hatchery for cooperative use and Troop 151, Harbor Creek Boy Scouts—James Nelson, scoutmaster—got into the act on the Kolbe property. And of course, the Pennsylvania Fish Commission contributed its share of technical help and young fish. As a result, the two nurseries were established in 1968 and have been functioning effectively since, producing about 2000 coho and 2000 steelhead annually.

Back a moment to the Dean Raceway for an illustration of the kind of people needed to make a cooperative nursery work. The Deans—David and his wife, Bernice—both fish and realize the need for helping nature along. So they owned the property through which Orchard Beach Run flowed; the water tested suitably for fish and the North East club was offered the site. Mrs. Dean frequently feeds the fish and admitted that it must be her "mother's instinct," but she hates to see them leave when they're ready. Then we left the picturesque snow-covered Dean Nursery and moved on with Bob Hetz to some of the 3 C U properties.

The 3 C U is actually the larger of the two operations and is, in a sense, the parent club of the cooperative nursery activity. In reality the word *club* is not a good term—*clubs* should have been used for the 3 C U organization includes the Erie County Sportsmen's League, the Gem City Outdoorsmen's Club, the Weslyville Conservation Club, and a chapter of Trout Unlimited.

First raceways were built in 1966. Trout and coho raised at that time would be included in this year's spawning run of mature fish. Incidentally, the first fish raised were mostly native fry spawned in local streams.

Continuing with the trip, the next stop was the "Poodle Parlour," which is exactly what it was. There's a building to groom dogs; there is also a fine stream that flows around it and the property owner, Ed Getz, contributed the site for nursery purposes. Fifteen hundred lake-run rainbows were being reared at the moment we were there.

Then it was on to the Trout Lake site where additional steelhead and coho were being reared. Again the property was donated to the organization. Charles Richardson, owner, had constructed a pond at the rear of his home with water controls and other devices to take care of about 4000 fish until they were ready to migrate to the lake. Stocking, by the way, is no problem for these Erie County clubs. When the fish are ready, they crowd the lower end of the ponds; someone lifts the downstream screen and the fish swim out, on their way to the lake.



RUHL RACEWAY SITE where steelheads were being reared at the time this picture was taken last winter.

Other sites were visited, both Fish Commission and cooperative. And everywhere the story was the same—dedicated people raising fine fish that would produce fabulous fishing for the future.

Bob seemed quite concerned with future plans; the present was in good order. He talked about the sources of eggs and fry which included eggs from Oregon, fry from New York's Catherine Creek, Fish Commission fish and natural fish from local coho and steelhead spawning. One of the last stops on the agenda was an egg jar station on one of the small streams. The 3 C U fellows have been taking their own eggs from migrating fish and are prepared to enlarge their hatching operation to eight jars which could be a lot of fish if all goes well.

With a fond farewell to host, Bob Hetz, and the others, including the waterways patrolmen Norm Ely and Jim Carter, we leave Erie County and some of the folks who made casting for coho this fall, a true part of *Casting with the Co-ops.*

BOATING QUESTIONS & ANSWERS

By **Capt. JACK ROSS**, Pittsburgh Marine Consultant

FROM E. S. D., PITTSBURGH:

"What kind of ship-to-shore radio would be best for my 21-foot sloop on Lake Erie; I have a 10-hp. outboard with battery-charger, and would like something with sufficient range for trips to Canada, and still not too much battery drain. Also, what would I do about an antenna?"

—Your best bet would be a 35-watt AM radiotelephone with fully-transistorized reeeiver. The baekstay of your mast ean be isolated with strain insulators and used as an antenna. Have the set installed and tuned by a qualified teehnieian, and you should have no diffieulty working stations aeross the lake.

FROM W. A. S., SALTSBURG:

"In a recent issue of the Angler you said that no permit was required for a non-licensed rowboat. I would like to point out that the Pennsylvania Department of Forests and Waters does require a permit to launch a boat on any state park lake."

—This is eorreet. The permit is required to launeh any type of boat, is good for one year, and the fee is $1.00. Applieations are available at all state parks, and the permit is issued on the spot. The permit is good on any of the state lakes.

FROM J. T. C., POTTSVILLE:

"What is cavitation and how is it caused?"

—Cavitation is the eondition that results when the propeller is turning too fast for its speed through the water, as when a too-large engine is pushing a slow hull. The water simply eannot get to the forward side of the blades fast enough, and a vaeuum is ereated in whieh the water vaporizes. This makes a bubble in whieh the prop raees. Cavitation is generally aeeompanied by severe vibration, whieh ean be damaging to seals and gears. Borderline eavitation ean be deteeted with a taehometer, whieh will show that the engine speed keeps running ahead, partieularly when the boat is steered to one side or the other, with no ehange in the boat's speed. When eavitation suddenly develops, it is usually a sign that the propeller is knieked or bent, even though there is no visible damage. With outboards and outdrives, an aeeumulation of algae on the lower unit ean also eause eavitation, by ereating turbulenee in the propeller suetion.

FROM J. B. K., BROCKWAY:

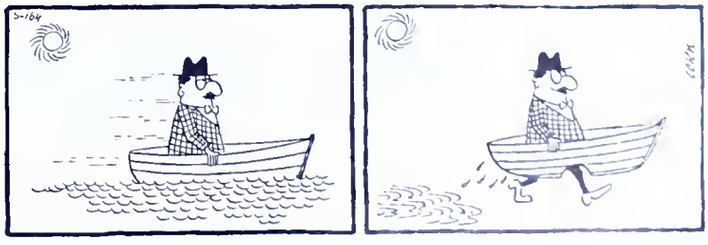
"Where can I purchase a steel pram or john boat about ten feet in length?"

—We know of no manufaeturer who is marketing a steel boat sueh as you deseribe, but it should not be diffieult to obtain one. Make some fairly detailed sketehes of an aluminum or fiberglass boat with the lines you like, and any welding shop ean turn you out a good hull. If you use 12-gauge Cor-Ten plate for the boat, it will never rust through, even if left unpainted. By eonstrueting airtight boxes at the bow and stern for seats, you ean provide enough flotation to make the boat unsinkable. Skiffs of this type are somewhat heavy, but no more so than a well-built wood boat, and handle well under oars or motor.

FROM G. F. W., PITTSBURGH:

"Is there a simple way to determine the condition of an inboard marine engine?"

—Only very roughly. If you warm the engine up to its normal operating temperature, it should idle smoothly at no more than 500 rpm and aeeelerate smoothly under load to its rated rpm. With the engine running, remove the oil filler eap. Any pressure you ean feel with your hand over the pipe indieates worn rings. Worn rod bearings will be indieated by a dull knoeking when the engine is aeeelerated under no load and then suddenly eut baek to idle. If oil pressure is less than 30 lbs. at idle or 45 lbs. at 2,000 rpm, the main bearings are probably worn exeessively. You should keep in mind, however, that even if the engine passes all of these tests, it may still be ready for a major overhaul, have a eracked block, or be suffering from any one of a hundred other troubles. Best bet when purehasing a used boat that is represented as having a servieeable engine is to plaee a portion of the purchase priee in eserow for some agreed period—say 30 days—to guarantee the performanee. If the seller is unwilling to do this, he may be willing to cut the price and make the sale on an "as-is" basis.



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